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Organizational Climate and School Size Related to Student Self-Concept and Attitude Toward School

Marvin E. Sorum

ORGANIZATIONAL CLIMATE AND SCHOOL SIZE RELATED TO STUDENT SELF-CONCEPT AND ATTITUDE TOWARD SCHOOL

by

Marvin E. Sorum

Bachelor of Arts, Minot State College, 1954
Master of Education, University of North Dakota, 1971

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This dissertation submitted by Marvin E. Sorum in partial fulfillment of the requirements for the Degree of Doctor of Education from the University of North Dakota is hereby approved by the Faculty Advisory Committee under whom the work has been done.

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PREFACE

Because every epoch of man's development is unique to its milieu, it requires its own modes of thought and understanding. Education, inherently a process of understanding, to be relevant to the current epoch of ultra-rapid development in the physical world, logically must itself develop new techniques to assure transmission and assimilation of thought and understanding. To keep abreast of the realities of technological and cultural changes which are apparent everywhere, the traditionally practiced, authoritarian psychology of administration in schools is ripe for change. Teachers are well prepared in subject matter but they don't have ready or adequate access to professional information which enables them to sense a need for change, they don't have a "helping relationship" type of philosophy which permits change, nor do they possess power to effect change. One way to effect change is to lower the "locus of power" through effective, administration facilitated, in-service teacher education and by creating unit-level school curriculum councils to handle curriculum and instruction.

The propositions that the locus of power in decision making and that provision for a wide variety of faculty resource information are most effective closest to the source of need are widely accepted. Planning to make these propositions "reality oriented" to teachers, students and parents, thereby establishing a "community of educational interest," seems worthy of thought.

Rigid sets of rules and regulations become outdated as modes of understanding change.

That there is a demand for change in education in terms of process and in product outcomes is evidence by the unrest at all levels of education in the United States and in North Dakota. Demonstrations against educational and other conditions, perceived to be inadequate or irrelevant (and, by some, even detrimental) in terms of social and personal needs and understanding have taken place almost daily during the past few years. Morphet, Jesser, and Ludka (1971, p. 21) write that " . . . there have been rebellions against rules, regulations and requirements set and rigidly adhered to by the national and other governments and there have been innumerable demands for changes." Most people accept change as normal, but many are having difficulty accepting the increased rapidity of that change as it is occurring. Farson (1969, p. 20) observed:

> . . . we live in a world which is continually changing. Whether we are talking about skyscrapers or family life, scientific facts or religious values, are all highly temporary and becoming more so. . . . Changes are coming faster and faster and faster--in a sense, change has become a way of life.

If the educational system in an otherwise rapidly changing society fails to adjust to the changes which are occurring, concerns of all the members of society are certain to increase. If an educational system fails to prepare its graduates and others to live and to cope effectively with change, that system will have failed both society and the individual.

Social and personal needs are not being met through the traditional education system (Rogers, 1969). Lipham (1964, p. 140) observed that "in educational organizations particularly, the emphasis has not been upon the nature of the product of the school but upon how smoothly the school operates--the extent to which 'the ship is well-oiled'." The neglect of these responsibilities adds to the confusion that exists in society. The resulting confusion serves to limit the opportunities to capitalize on the inherent capabilities of society. A major practical and realistic goal to the educational system is to educate for human excellence. Intellectual development is only a segment--although an important segment--of a general education. Reich (1970, p. 5) wrote:

> . . . today's emerging consciousness seeks a new knowledge of what it means to be human, in order that the machine, having been built, may now be turned to human ends; in order that man once more can become a creative force, renewing and creating his own life and thus giving life back to his society.

The ultimate test of a society and its institutions is whether they are in fact adequate for present and future needs.

Better schools (Halpin, 1967, p. 174) geared to release the school community's creative forces in a humanistic way are urgently needed. Schools which have achieved an "open climate" atmosphere of trust and cordiality among administration, staff, students, and parents create a desired sense of "community." Thus Halpin (1967, p. 218) observed that in order to develop the "focal attention" required to understand reality, the teacher, too, must be temporarily free from a need-driven interest or anxiety. The principal and teachers must be free from individual member's need-dominated attention so that they can deal with each other openly and apprehend the school's tasks with

competence. Much as the child is free to focus on a problem if his outside needs are stabilized, so, too, must a teacher be free from personal anxiety to concentrate on the needs of the school's tasks. Not every teacher, administrator, child, or parent, through circumstances peculiar to him alone, is free to develop focal attention, but the majority can do so if the proper conditions are present.

The concept of focal attention is best illustrated through the work of Schachtel. Schachtel (1959, p. 268) identifies focal attention as:

> . . . the tool, the distinctively human equipment, by means of which the capacity for object interest can be realized. There is no proof that the wish for need satisfaction alone would ever lead to object perception and to object-oriented thought--that is, to a relatively objective view of reality.

The more urgent the individual's need-driven perception and thought, the less likely he is to grasp and understand the object of his concern. An open climate is not likely to develop in a school where the key individuals lack focal attention. But understanding the concept is necessary to understand the relationship between focal attention and individual achievement in school.

To understand more of the human problems involved, Schachtel (1959, pp. 273-275) analyzes the relationship between focal attention and the individual's development of a sense of identity. The analysis applies to both adults (administrators, parents, and teachers) and to children:

> The development of focal attention and the emergence of the object world pre-suppose relative freedom from basic need tension, so that the object can be perceived under many different aspects, rather than apprehended merely as something that will satisfy hunger or that arouses fear and has to be fled from. And even after focal attention

> is fully developed and the environment is perceived as consisting of distinct objects, the need-driven (as opposed to the object-interested) perceiver or thinker will not see the object as fully in its own right as will the person who contemplates it in relative freedom from acute need tension. Curiosity, the desire for knowledge, the wish to orient one's self in the world one lives in--and finally the posing of man's eternal questions, "Who am I?" "What should I do?"--all these do not develop under the pressure of relentless need or of fear for one's life. They develop when man can pause to think, when the child is free to wonder and to explore. They are not, as Freud would have us believe, merely detours on the path to gratification of basic biological needs, any more than thought is only a substitute for hallucinatory wish fulfillment. They represent man's distinctive capacity to develop interest--the autonomous interest which alone permits the full encounter with the object.

An open climate of trust and cordiality leading to individual creativity requires a climate free from repressive forces.

Creativity lies dormant within the individual. Only if the climate is favorable can one be creative. Etzioni (1964, p. 69) observes:

> Creativity is basically individual and can only to a limited degree be ordered. . . . Thus, the degree to which an organization selects its participants affects its control needs in terms of the amount of resources and effort it must invest to maintain the level of control considered adequate in view of its goal.

Therefore, acquiring a principal and a teaching staff who can create an open climate in a school may be difficult and expensive because few teachers or principals are trained in the technique of the open climate.

Some thoughts about educational administration in an open climate.

Carl Rogers (1969, p. 207) describes the administrative role in creating an open climate in a school system. He hypothesizes:

> In terms of this theory the educational administration is responsible for organizing the resources of the institution, the teachers, the students, the funds, the equipment and materials in such a way that all of the persons involved can work together toward defining and achieving their own educational goals. The mainspring of the organization is the motivation for development and learning which is inherent in each person. The task of the administrator is to so arrange the organizational conditions and methods of operation that people can best achieve their own goals by also furthering the jointly defined goals of the institution. The administration finds that his work consists primarily of removing obstacles such as "red tape," of creating opportunities where teachers and students and administrators (including himself) can freely use their potential, of encouraging growth and change, and of creating a climate in which each person can believe that his potential is valued, his capacity for responsibility is trusted, his creative abilities prized.
>
> It should be clear from the above that responsibility and authority and initiative would be diffused throughout the group in order to make the best use of all available knowledge, skill and originality, and thus to maximize the soundness of decisions. By following such a policy the development of the individuals involved is also maximized.

The administrator himself is not exempt from this policy. He also has the responsibility of using himself in self-fulfilling ways such as he would make possible for his staff and students. For the administrator to act as a catalyst in an open climate school system requires unique approaches to the problems of locus of power in decision making, in providing for a wide variety of faculty resource information, and in providing for on-the-job, administrator-taught, college credit philosophy courses. Other non-administrator taught specialized courses could also be added. But the administrators should teach the educational philosophy courses, thus permitting feed-back from the staff and allowing for a consensus of educational philosophy to develop within that school system.

An in-service training program for teachers, parents, and administrators seems necessary to help in achieving the objectives

of a true "open climate" system leading to creativity and a sense of community. If professional educators believe in education, then education is the logical vehicle with which to solve social and personal problems. Nash (1966, p. 118) observes that "the only educated man is he who conceives his own education as a lifetask, based on a rigorous process of self-discipline." This concept is not hortatory or adumbrative in nature. Rather it is reality-oriented to present social problems. The mantle of responsibility for school and staff education rests logically in the school superintendent's office.

An administration leadership design through educational process: Three hypotheses.

Accordingly, to help solve the problems of the community of educational interest, three hypotheses are presented for thoughtful consideration.

Hypothesis No. 1.--Qualified school administrators with advanced degrees can best exert through the vehicle of extension courses taught for university credit, a positive non-authoritarian leadership within their school systems.

To replace faculty meetings with a technique which promises more effective leadership, hypothesis number one calls for a university credit course to be instructed by a ranking administrator in the school system. Through the introduction of resource materials, library materials, current professional journals, small group discussions, and visual aid materials, the administrator is in a unique position to guide his staff. Peterson (1970, p. 33) says that "it is the teacher's [i.e., the administrator's] task to initiate the

material of knowledge that will enable activities to be selected which lend themselves to synthesis and interpretation." The guiding school philosophy can thus be effectively communicated, synthesized, and interpreted in the light of current philosophical thought. The staff will have conceptualized administrative philosophy permitting each staff member to make decisions at his level consistent with that philosophy. Thus the locus of power can be effectively lowered through delegation of power.

Hypothesis No. 2.--Qualified school administrators with advanced degrees can best provide their teaching staffs with a wide variety of faculty resource information within a continuing education process or inservice training program.

Administrators are in a unique position to disseminate information and materials because they have direct access to the order book and to the school's mail. A qualified administrator teaching a university credit course to his staff could call attention to the information received and thereby create interest in it. An audio-visual course could be taught effectively using and demonstrating a variety of informative films as an example. The opportunities are there for large scale dissemination of information. On the plus side, also, is the fact that the administrator will get to know his staff and receive feedback from them. Combs (1965, p. 63) makes the observation that "there are supervisors who don't really think students [i.e., teachers] are able, and administrators are so busy dealing with things they forget about persons." Iannaccone (1968, p. 229) observed that "The quality of decision-making in an organization is related to the

amount of relevant information available concerning the issues under consideration." The forum is there. The possibilities are circumscribed only by imagination.

Hypothesis No. 3.--Utilizing the provisions of hypothesis number one and number two and through the adoption of multi-level administrative councils involving representative parent members and children of the school district, an open climate can be established which will effectively lower the locus of power in the school system to grade level units. This will permit the development of focal attention, the release of creativity at all levels, and the development of a strong sense of community.

The thrust of this hypothesis is to use the educational process to shift the responsibility for education to the point of contact between the learner and the school. Morphet, Jesser, and Ludka (1971, p. 8) observed:

> . . . the trend toward a new concern for quality and the human dimension in a technological world appears likely to continue . . . likewise a higher standard of efficiency in terms of social accountability can be expected. There appears to be a definite trend in our society from authority by position and power to authority on the basis of knowledge and greater participation in decision making.

A re-design of the school power structure to accomplish the philosophical goals set forth in this paper seems necessary.

Accordingly, the design calls for a diffusion of power with an elected school board accountable to the people but with different responsibilities from those commonly assumed. The school board would keep its financial responsibilities and would hire the administrators, but its education responsibilities would be altered. Curriculum

councils would be organized at each grade level unit or multi-grade level whichever seems an effective grouping. Curriculum responsibility would reside with each curriculum council. Each curriculum council would consist of teachers from that unit plus representative parents, students, and an administrative member.

The parents and students would be elected by representative parents and student groups. The teacher positions would be filled by recommendation of teacher and administrative members but with the advice and consent of the full curriculum council. Curriculum would evolve within each curriculum council and would reflect the felt needs of that unit. Questions of continuous progress education could be resolved through cooperation between curriculum councils. Adult members of the curriculum councils would be subject to the leadership of a top administrator through hypothesis number one and subject to the techniques of hypothesis number two for the dissemination of information. The locus of power can thus rest closest to those who are most intimately involved with decision making and with the results of those decisions. If administrators really believe in education and trust the results, the attempt to restructure power cannot be feared. The administrator can become a helper in a helping relationship serving what Purkey (1970, p. 50) describes as "a model of genuineness without 'front'."

Maslow's (1962, p. 222) description of his philosophy of education is also appropriate here. He describes his faith in human nature by writing:

> It draws some of the truly revolutionary consequences of the discovery that human nature has been sold short, that man has a higher nature which is just as "instinctoid" as his lower nature, and that his higher nature includes the needs for meaningful work, for responsibility, for creativeness, for being fair and just, for doing what is worthwhile and for preferring to do it well.
>
> To think of "pay" in terms of money alone is clearly obsolete in such a framework. It is true that the lower need gratifications can be bought with money; but when these are already fulfilled, then people are motivated only by higher kinds of "pay"--belongingness, affection, dignity, respect, appreciation, honor--as well as the opportunity for self-actualization and the fostering of the highest values--truth, beauty, efficiency, excellence, justice, perfection, order, lawfulness, etc.

Teachers, administrators, and parents working within this concept of a helping relationship can concentrate their time, energy and intelligence and address themselves to their responsibility: teaching children, teaching human beings.

This theory of administration is not about some new trick in management nor is it designed as a new "gimmick" to manipulate human beings for an administrator's purposes. It is designed to stimulate and nurture human values. It is confrontation between one set of administrative values centered in the pinnacle of a power structure on the one hand and, on the other hand, a newer set of values which claims to be not only more efficient in terms of administration but also more efficient and more true in terms of human values. The person-to-person relationship envisioned here is one of a strong personal diadic relationship which allows a teacher to become a true professional. But of equal significance, administrators and teachers will know and are more likely to understand psychology--not educational psychology per se but psychology in terms of basic

principles of human learning and understanding as well as their concomitant anthropological social and cultural aspects.

No one will deny that a great community has a healthy philosophic outlook. The greatness of a community both qualitatively and quantitatively is the first condition of a steady prosperity. In this age of democracy, the plain citizen is king. Our economic life requires that he be a knowledgeable individual who can participate in a democratic state. But there can be no successful democratic society until general education conveys a philosophic outlook. Alfred North Whitehead (1933, p. 98) observes that philosophy is:

> . . . a survey of possibilities and their comparisons with actualities. In philosophy, the fact, the theory, the alternatives, and the ideal, are weighed together. Its gifts are insight and foresight, and a sense of the worth of life, in short, that sense of importance which nerves all civilized effort. Mankind can flourish in the lower stages of life with merely barbaric flashes of thought. But when civilization culminates, the absence of a coordinating philosophy of life, spread throughout the community, spells decadence, boredom, and the slackening of effort.

Mankind is in the process of shifting its outlook. Tradition has lost its force. It is up to us as educators and as practical men to restructure education at all levels to accommodate this change.

It is clear that the professional participants in the educative process need a further and deeper understanding of the complexities and subtleties comprising the interactive effects of community, school, and home on the education of children. The thesis and design of this research developed from a recognition of this need and will study some of the effects of school climate, school size, and student background transeunts on student self-concept and attitude toward school.

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ABSTRACT

The Problem

This study had as its purpose the investigation of the nature and the degree of the relationship between the size of a secondary school, the organizational climate of the school and the student background transeunt effects on student attitude toward school, and on student self-concept. This study investigated the differences which existed between school size and selected student and teacher variables; and, then, if there were differences, to discover the nature of those differences.

Sample

Based on the secondary school population, thirty-four North Dakota secondary schools were divided into: school size 1 ("over 1,000"), school size 2 (501-1,000), school size 3 (251-500), school size 4 (100-250), and school size 5 ("under 100"). The samples per school size consisted of 160 second semester, 12th grade students and 40 faculty members engaged in the teaching-learning processes of the student sample. Therefore, the universal sample consisted of 800 students and 200 faculty members.

Procedure

Data for the study were gathered by administering the Self Appraisal Inventory and the School Sentiment Index to the student

sample and the Organizational Climate Description Questionnaire to the faculty sample. These instruments were administered to the research population during the month of March, 1972.

Summary of the Findings

1. The most favorable combination of factors affecting student success in secondary schools in North Dakota were: (a) a positive student attitude toward school, (b) positive family ties and influence, and (c) a high school principal whose behavior is characterized by his evident effort to "move the organization" through example. A negative learning situation is one where: (a) a student has a negative attitude toward teachers because of the mode of instruction, (b) a student feels that he cannot be trusted, and (c) teachers are characterized by low esprit.

2. Secondary schools with over 500 students developed the most favorable school climate as measured by the school staff.

3. Schools of 500 and fewer students provided more favorable developmental climates for positive student self-concept and attitude toward school.

4. Participation in school sports has a high transeunt peer value but no significant transeunt value to teacher instruction, authority and control, interpersonal relationships, or learning.

5. Student participation in journalism has the highest transeunt value of all school activities.

6. Farm backgrounds provided higher positive attitude toward school and had high peer value.

7. Students who plan to continue their education had a higher positive self-concept and attitude toward school.

8. Work in the household was most beneficial to a student in terms of self-concept and attitude toward school.

9. The size of a student's family or the order of his birth had no significant transeunt effect.

10. If a student considers himself in the upper one-half of his class, the transeunt value significantly enhances his self-concept and attitude toward school.

11. Girls have significantly higher self-concepts and attitudes toward school than do the boys.

CHAPTER I

FORMULATION AND DEFINITION OF THE PROBLEM

Introduction

To develop an educational program appropriate to the needs of today's youth, it seemed essential to make a study of those needs by investigating forces which impinged upon them. Those forces of reform debated by parents, lay citizens, professional educators, government officials within the State of North Dakota and elsewhere, and in the nation's communications media, centered around a number of controversial cognitive vs affective instructional areas. Two areas investigated herein were: (1) the effects of the school's climate and the effects of the size of the school upon a student's self-concept and attitude toward school, and (2) the effects of student background transeunts on student self-concept and attitude toward school.

In the past the major thrust of research wmphasized the cognitive areas of educational programs. Individual differences were submerged in the interests of the "class" as a unit. A teacher instructed a class, so research centered around how best to efficiently carry out that instruction. The public accepted this method of research and instruction because it was the most orderly and the most "efficient" use of school resources. Efficiency of

the school could be measured by testing procedures. School boards and the public could read statistics generated to prove efficiency in cognitive terms.

Superintendents and principals could "justify" their administrations through citing these efficiency reports. Cognitive emphasis in the educational process seemed logical, adaptable to social and economic changes, and the technique was secure in the minds and in the hearts of responsible officials and of the public. But no one could predict the nature, the depth, or the extent of the forces for change released by the recent period of rapid technological progress.

Old but cherished ways of managing the industrial labor force changed which in turn triggered changes in American social life and in education. Diebold (1973, p. 42) observed that in many ways, the huge strides made in technology were at the heart of today's social tumult and upheaval: "People wondered why, with all our progress in turning out mass-produced goods we can't have cleaner streets, more efficient transportation, better results from our school systems, a pollution-free environment." Perhaps the most bitter critics on the impact of technology on the American social scene, Galbraith (1967), Roszak (1969), Reich (1971), and Toffler (1971) agreed that the impact on education would be in the affective areas. Thus the role of the school and the role of background transeunts, because they were thought to affect student self-appraisal and attitude toward school, together with the role of the school, itself, became objects for research.

Several studies have shown that it was possible to develop a curriculum in which the expected learning takes place while positive

self-concepts were being built. Frankel (1964) studied the effects of a special program of advanced summer study on the self-perceptions of academically talented high school students. He found that the self-concepts of the group showed significant gains after attending the program especially in the areas of self-reliance and special talents. In a similar study of the effects of pre-kindergarten on self-concepts, Crovetto, Fischer, and Boudreaux (1967) developed a modified Head Start curriculum designed to affect the child's self-concept in a positive way. The experimental curriculum was found significantly effective in helping to develop a more positive self-concept in children. Hidden beneath the program arrangements and the innovations, however, lay the teacher's personal role in building positive student self-appraisal leading to a positive student self-concept.

A basic assumption of the theory of the self-concept was that man behaves according to his beliefs (Purkey, 1970). If this assumption were valid, it then follows that the teacher's beliefs about himself and his students were crucial factors in determining teacher effectiveness in the classroom. Combs (1965a) indicated that a teacher's attitude toward himself and others was as important, if not more important, than his techniques, practices, or materials. Combs (1961b, pp. 15-23) observed:

> . . . we must regard the individual's self as a recognized part of the curriculum. People learn who they are and what they are from the ways in which they are treated by those who surround them in the process of their growing up. What we do in class, therefore, affects the individual's ways of seeing himself whether we are aware of our impact or not. We teach children who they are and what they are by the kinds of experiences we provide. Many school deficiencies we now know are the result of a child's belief that he cannot read, write, or do math. A child may be taught that he

> cannot read from the impatience and frustration among those who sought to teach him.

Research and theory generally agreed that attitudes played an important role in the relationship between the teacher role and student self-concept and attitude toward school.

However, there were many questions still unanswered concerning the relationship between student self-concept and attitude toward school and the roles played by the teacher, by student background transeunts, and by school size. This was particularly true in North Dakota where no experiments or research had been conducted linking school size and climate with student variables. No effort had been made to ascertain whether a relationship exists between self-concept and student attitude toward school.

Statement of the Problem

The purpose of this study was to investigate the nature and the degree of the relationship between the size of a secondary school, the organizational climate of the school and the student background transeunt effects on student attitude toward school, and on student self-concept. Areas which were of specific interest included: (1) a student's attitudes about himself, (2) a student's attitude toward the school climate, (3) a student's attitude toward peers, (4) a student's attitude toward his family, and (5) a teacher's attitude toward the organizational climate of the school. A secondary purpose was to discover if differences existed between school sizes on student and teacher dimensions, and if there were differences, then, to discover the nature of those differences.

Research Questions

To investigate the problem this researcher has endeavored to answer the following research questions:

1. Is there a relationship between student variables (student self-concept and student attitude toward school) and school climate?
2. Is there a relationship between school size and teacher perception of school climate?
3. Is there a relationship between school size and student perception of school climate?
4. Is there a correlation between student background transeunts and student variables as measured by student attitudes toward school and student self-appraisal?
5. Is there a difference in male and female student's attitudes toward school and in self-appraisal?

Delimitations

The parameters of the problem under investigation were subject to the following delimitations:

1. This study was concerned with students attending and staff employed by 34 North Dakota secondary schools. These schools were randomly selected and classified into five sizes based on individual school student population count (see Appendix A).
2. Only those students in grade twelve, second semester, 1972, were included in the study.

3. Only secondary school staff who had taught the grade twelve sample were included in the study.
4. Only those students (94%) who completed all items of the student instruments were included in the study.
5. Only those teachers (97%) who completed all items of the teacher instrument were included in the study.

Limitations

1. The findings of this study were limited by the reliability and validity of the instrument used to measure student self-concept, the Self-Appraisal Inventory (SAI), developed by the Instructional Objectives Exchange (IOX).
2. The findings of the study were limited by the reliability and validity of the instrument used to measure student attitude toward school, the School Sentiment Index (SSI) developed by IOX.
3. The findings of this study were limited by the reliability and validity of the instrument used to measure school climate, the Organizational Climate Description Questionnaire (OCDQ) developed by Halpin and Croft.

Significance of the Study

A research study of this nature has implications for education in three areas: (1) To provide a conceptual basis for teacher education on the secondary level. (2) To provide a conceptual basis for change for school administration. (3) To provide a conceptual basis

for determining the optimum size of schools in North Dakota both in the areas of the future redistricting of schools and to determine the size of new secondary schools in the cities of North Dakota.

Heretofore, no valid basis existed for determining the optimum size of school districts in North Dakota in terms of student self-concept and student attitude toward school. No valid basis existed to change teacher education in affective areas. And no conceptual basis existed other than monetary consideration in the on-going process of school redistricting and in determining the optimum number of students which a school plant in the larger North Dakota cities could effectively serve in terms of affective considerations. Therefore, the measurement of student attitudes toward school and measurement of student self-appraisal was important to the concepts as outlined above.

Definition of Terms

Self-concept.--Self-concept refers to the beliefs and attitudes which a student has about himself, about himself in relationship to others, and about himself in his relationship to his surroundings. Combs, Avila, and Purkey (1971, p. 39) defined self-concept as "all those aspects of the perceptual field to which we refer when we say 'I' or 'me.' It is that organization of perceptions about self which seems to the individual to be who he is."

Cognitive learning.--Gage (1971, p. 266) defined cognitive learning as:

> The learner arrives at knowledge and understanding by perceiving the situation (the problem) before him and then re-arranging it, through central cognitive processes, in ways that yield meaning of a rational, logically consistent

> kind. . . . This conception of teaching follows the metaphor of the manipulator of stimuli who compels perceivers to see the stimuli in certain ways.

Affective learning.--The Fund for the Advancement of Education (Ford Foundation) through its action research arm, The Elementary School Training Project (Weinstein and Fantini, 1970, p. 24) defined affective learning as:

> . . . not only intense feeling or emotion; it is also an expression of the basic forces that direct and control behavior. Many of these forces, such as the inner need for positive self-concept, power, connectedness . . . are the intrinsic drives that motivate behavior.

Attitudes.--The term, attitudes, means all that a student feels and thinks about a subject. Thurstone (1964, p. 6) defines attitude " . . . to denote the sum total of man's inclinations and feelings, prejudice or bias, preconceived notions, ideas, fears, threats, and convictions about any specific topic."

Transeunt.--The term, transeunt, as used herein means producing an effect outside itself which affects student behavior either consciously or unconsciously.

Organizational Climate.--Halpin (1966, p. 131) described organizational climate as "analogously, personality is to the individual what Organizational Climate is to the organization." The term, organizational climate, means the "personality" of the school. It concerns the "feelings" of the teachers evoked by a combination of influences existing within a school thus the term, "personality" of a school.

Academic Achievement.--Academic achievement is a term used to describe the degree of mastery of institutionally prescribed subject

matter in a variety of academic subjects. It is used as a measure of the cognitive domain of behavior.

Organization of the Study

The remaining chapters in this investigation were organized in the following order: A presentation of the review of the literature related to self-concept, academic achievement, student attitude toward school, teacher attitudes toward the organizational climate of schools, and school size in relation to self-concept and school climate was presented in Chapter II. Chapter III contained a description of the research population, instruments used, and the statistical treatment employed. In Chapter IV a presentation of the findings of the study and the results of the statistical analysis were given. Chapter V was devoted to a summary of the findings, to conclusions which can be drawn from the investigation, and to implications and recommendations for future action in secondary education and in higher education.

CHAPTER II

REVIEW OF RELATED LITERATURE

This volume, which deals exclusively with environmental determinants of student behavior as related to self-concept, would leave the reader with an unbalanced picture, indeed, were it not for this chapter. Research is meaningful only within a framework of related literature. Many of the traditional polemics in education have issued from early misconceptions about the nature of learning and the failure of leaders in education to comprehend and to adequately weigh the interactive effects of learning with the environment.

An issue which has divided professional educators was the relative emphasis to be placed on affective dispositions as opposed to cognitive capabilities. To some, the pupil's cognitive resources and capabilities were the main concern. To others, how the pupil feels--his happiness, his interests, his self-concept, his yearnings--are what should concern teachers. Exponents of each school of thought would agree with Ebel (1972, p. 4) who said " . . . that cognition and affect interact, and that no school ought to concentrate solely on one and ignore the other." The related literature was restricted to the experiential, interactive effects of learning with the environment. Stated differently, a student carries with him the sum of his total experiences, cultural, family, background, and school, and applies those experiences to new learning.

Consequently, the related literature in this chapter deals primarily with (1) a philosophical review of the role of experiential aspects in learning--to provide the research with a conceptual basis, (2) student background transeunts related to self-concept and attitude toward school, (3) student self-concept and attitude toward school related to school climate, and (4) effects of school size on teacher performance and student attitudes.

The assumption in a work of this nature was that one must remain "traditional," "logical," and "universal" in his approach. Nevertheless, candor requires that the author approach the review of the related literature with an exposition of his philosophical approach to education to provide a conceptual basis as a reference point for the related research.

Consequently, the spirit of this work was one of mild existentialism. Park (1968, p. 4) defined the philosophy of education as "an attempt to find answers to questions some would call ultimate." The philosopher is interested in the nature of reality, sources of value, and what these may mean for education in terms of aims, curriculum, and method. That is, insofar as existential philosophy has a practical value, this consists in making clear what, in given circumstances and on the whole, was the best use to make of such powers as one happens to have, or a discovery of the best means to employ, out of several at one's command, in order to achieve a certain end (Peterson, 1970). It means that this effort must not be judged by standards alien to existentialism. Rather, it must be judged as a manifestation, acceptable to existentialists, of this investigator's

conviction about the nature and value of existentialist views in its relation to education.

Galbraith (1967), Fromm (1968), Roszak (1969), Reich (1971) and Toffler (1971) have said that the major problem of our century was how to promote the development of society without doing violence to the integrity of the individual. With this point of view in mind, this investigator began his search for ways in which man's freedom to create may be more widely established and understood. If this volume, limited as it was to a better understanding of how certain environmental influences impinged on secondary students in North Dakota schools, has an underlying spirutual purpose, it was to help in the realization of a better, more authentic education for each of North Dakota's youth. It, therefore, seemed reasonable to assume that, as Kneller (1958, p. 42) concluded, "the problems of human existence, its nature and meaning, become the problems of education."

Modern existentualism (Kneller, 1958) may be said to have originated with the work of Soren Kierkegaard. Kierkegaard concentrated on portraying the single phenomenon rather than speculating on the universal. Modern existentialists (Kneller, 1958) applied this phenomenological method to many areas which were neglected in the field of education such as awareness, freedom, anxiety, and authenticity.

As Kierkegaard (Arbaugh and Arbaugh, 1967, p. 210) expressed existentialism, truth lies in subjectivity. True existence is achieved by intensity of feeling. Man is more than part of the whole. "One might say that I am the moment of individuality, but

I refuse to be a paragraph in a system," Kierkegaard wrote (Wahl, 1949, p. 4). The existent individual, as Kierkegaard (Wahl, 1949, p. 5) defined him, is: (1) He who is in an infinite relationship with himself and has an infinite interest in himself and his destiny. (2) The existent individual always feels himself to be Becoming, with a task before him. Kierkegaard said as an example that one is not a Christian but one becomes one. It is a matter of effort. (3) The existent individual is impassioned with a passionate thought. He is inspired. He is a kind of incarnation of the infinite in the finite. This is the passion which thrusts the existent forward. It "is the passion of freedom," says Kierkegaard (Wahl, 1949, p. 4).

Kierkegaard stressed the importance of choice and decision. Each decision (Haufniensis, 1844, p. 77) is a risk because each of us feels himself surrounded by and filled with uncertainty. But we must decide. The object of our thought is the infinite. It cannot be less because our thought step-by-step goes beyond the next. We seek the infinite. Our decision like those in Ibsen's (Cerf, Klopfer and Hass, 1935, p. 605) John Gabriel Borkman are, therefore, decisions between All or Nothing. Under the influences of these passions and decisions (Kneller, 1958, p. 138), the individual will always attempt to simplify for himself by returning to original experiences which have worked well for him in the past. He will attempt to become what Kierkegaard called an "existent individual." Thus the application to learning was established.

But Kierkegaard went beyond the subjective. He reasoned that there is no subjective without a rapport with a being. That being according to Kierkegaard is God. It is in this matter of a being

before God which made Kierkegaard's philosophy different from others because to feel one's-self before God is to feel one's self a sinner. Ibsen (Cerf, Klopfer, and Hass, 1935c) expressed this idea through the character, John Gabriel Borkman's visions of the works he could have accomplished in conjunction with nature in act IV. Borkman became an existent individual because he was in contact with something outside himself. Borkman experienced this intensity of feeling which was his crucifixion of his understanding (Wahl, 1949). Borkman was "essentially anxious and infinitely interested" in respect to his existence (Borkman brooded eight years in his room) because an eternity of pains or an eternity of joys depended upon his relationship with the God whom he knew (Cerf, Klopfer, and Hass, 1935c, p. 605). Thus Borkman was in relationship with what Kierkegaard called "the absolute other" (Wahl, 1949, p. 6).

To develop the conceptual basis for the related research, one must also consider Kierkegaard's concept of possibility. He held that any philosophy which denies possibility is oppressive and suffocating. But the acceptance of possibilities should not result from social pressure; rather, it should spring from one's own free will. Ibsen used Nora in The Doll's House (Cerf, Klopfer, and Hass, 1935a, p. 3) and Mrs. Alving in Ghosts (Cerf, Klopfer, and Hass, 1935b, p. 95) in particular to demonstrate this principle. However, this concept was used throughout Ibsen's plays. Also the idea of Possibility (Kierkegaard, 1959) was linked to the idea of Time. This later idea Ibsen (Cerf, Klopfer, and Hass, 1935d, p. 291) used in The Master Builder through Solness. Solness held on to the possibilities that he again could become a master builder in his time.

Solness succeeded in his endeavor. But he succeeded only because he went through the experience of anguish and reflection, which Kierkegaard likened to dizziness, as a revelation of the possibilities which lay ahead (Wahl, 1949). Maslow (1962) called it the moment of self-actualization.

In Kierkegaard's view man is neither just another substance nor a subject capable merely of a cognitive relationship to his environment. But man is both a creator in his environment and is the subject of the responsibility for developing his own being--his mature self. If man is truly authentic, he can be true to himself. He can reveal Being as it is. The reverse is true if a man is not authentic. One becomes unaware of his possibilities and is thereby incapable of perceiving and revealing reality as it really is (Wahl, 1949). This view of Being permeates all of Ibsen's characters. The application to education is obvious.

Ibsen (1964, p. 337) spoke indirectly to the process of learning when he said in his declining years at a reception for him in Stockholm:

> My task has been the description of humanity. To be sure, whenever such a description is felt to be reasonably true, the reader will read his own feelings and sentiments into the work of the poet. These are then attributed to the poet; but incorrectly so. Every reader remolds the work beautifully and neatly, each according to his own personality. Not only those who write but also those who read are poets. They are collaborators. They are often more poetical than the poet himself.

Conceptualization of meaning, writes Peterson (1970, p. 4) " . . . is the proposition which gives structure and perspective to the thought process.

The student also reacts to those in authority in the school who by being a part of the school constitute a part of the general school environment. Halpin (1966, p. 241) was concerned with the "genuineness" of teachers and administrators and their effects on students. He said that "metaphorically we can differentiate between the 'nongenuine' person and the 'genuine' one by saying that the nongenuine person seems to be two-dimensional, and hence 'thin'; however, the genuine person strikes us as three-dimensional and as a person in depth." Essentially this quality was what the philosopher, Buber (1970, p. 56), refers to in discussing "I - Thou" relationships: "The basic word I-You establishes the world of relation." Thus Buber described the three dimensional or genuine person. Halpin and Buber viewed the three dimensional teacher or student as being the "existentially existent" individual.

Buber (1970, p. 108), also, philosophised on the role of caprice, freedom, and fate applicable to the life of a student or teacher in relation to his school environment (administrators, teacher, peers) and his home environment (family, friends):

> Even as freedom and fate belong together, caprice belongs with doom. But freedom and fate are promised to each other and embrace each other to constitute meaning; caprice and doom, the spook of the soul, and the nightmare of the world, go along with each other, . . .
>
> Free is the man that wills without caprice. He believes in the actual, which is to say: he believes in the real association of the real duality, I and You. He believes in destiny and also that it needs him. It does not lead him, it waits for him. He must go forth with his whole being that he knows. It will not turn out the way his resolve intended it; but what wants to come will only if he resolves to do that which he can will. He must sacrifice his little will, which is unfree and ruled by things and drives, to his great will that moves away from being determined to find destiny. Now he no longer interfers, nor does he merely allow things to happen. He listens to that which grows,

> to the way of Being in the world, not in order to be carried along by it but rather in order to actualize it in the manner in which it, needing him, wants to be actualized by him--with human spirit and human deed, with human life and human death. He believes, I said; but this implies: he encounters.

But the capricious man was characterized as one who does not believe and encounter. Nor does he know association. Buber (1970, p. 109) observed that such an individual "only knows the feverish world out there and his feverish desire to use it. . . . When he says You, he means: You, my ability to use." He has no destiny, but regulates his life by things and drives. He feels autocratic and is capricious. He has no great will but employs caprice in its place. He cannot sacrifice, never becomes concrete, but talks of it. He constantly interferes, in order to "let it happen." How, he says, could one fail to assist destiny? He employs all feasible means to gain his ends. The capricious man views the free man with cynicism because he cannot view him otherwise. But the free man by contrast does not proceed to an end here and look for means elsewhere, but wills, instead, to proceed toward his destiny.

The capricious man cannot perceive anything but unbelief and caprice, "positing ends and devious means" wrote Buber (1970, p. 109). He is entangled in unreality and upon realizing this, he uses his mind to obscure or to prevent such recollection. If this man permitted himself to reach down to roots of his despair, this would be the beginning of the capricious man's return. With each encounter Buber indicated that the student established another link in the world of relationships on his road to becoming self-actualized in the Maslowian sense (Maslow, 1962).

Believing that a sense of advance and a sense of penetration must be present in student learning situations, not only on a private basis but, also, on a broad, mass basis, Whitehead (1966, p. 57) sketched the broad outline of this phenomenon of human experience:

> The dogmatic assumption of the trinity of nature as its sole important dimensional aspect has been useful in the past. It is becoming dangerous in the present. In the future it may be a fatal barrier to the advance of knowledge.
>
> Also, this planet, or this nebula in which our sun is placed, may be gradually advancing towards a change in the general character of its spatial relations. Perhaps in the dim future, mankind, if it then exists, will look back to the queer, contracted three-dimensional universe from which the nobler, wider existence has emerged.
>
> These speculations are, at present, neither proved nor disproved. They have however a mythical value. They do represent how concentration on coherent verbalizations of certain aspects of human experiences may block the advance of understanding. Too many apples from the tree of systematized knowledge lead to the fall of progress.
>
> The sense of advance, of penetration, is essential to sustain interest. . . . We cannot prescribe the pattern of progress.
>
> It is true that advance is partly the gathering of details into assigned pattern. This is the safe advance of dogmatic spirits, fearful of folly. But history discloses another type of progress, namely the introduction of novelty of pattern into conceptual experience. In this way, details hitherto undiscriminated or dismissed as casual irrelevances are lifted into coordinated experience. There is a new vision of the great Beyond.
>
> Thus understanding has two modes of advance, the gathering of detail within assigned pattern, and the discovery of novel pattern with its emphasis on novel detail. The intelligence of mankind has been halted by dogmatism as to pattern of connection. Religious thought, aesthetic thought, the understanding of social structures, the scientific analysis of observation, have alike been dwarfed by this fatal virus.

Dogmatism as to pattern of connection of human experiences entered European thought, Whitehead (1966) noted, at the beginning of Greek thought. Epicurus, Plato, and Aristotle were convinced of the certainty of their own experience and ideas in the exact forms

in which they undertook them. But they were not aware of the perils of certainty in a world of abstraction. There was general affirmation of the genius of this certainty.

Yet, history recorded the tragedy of these great men in the sense in which they held their beliefs. Whitehead (1966, p. 58) commented that "not one of their doctrines has survived the wider knowledge of the last two centuries. Mathematics is not true in the sense in which Plato conceived it. Sense data are not clear, distinct, and primary, in the sense in which Epicurus believed." A study of history indicated that a sense of penetration was lost when knowledge was held to be completed. Whitehead concluded that "the history of thought is a tragic mixture of vibrant disclosure and of deadening closure. This dogmatism is the antichrist of learning."

Thus, as learning thrusts toward concrete apprehension of knowledge, history has taught us that the inconsistency in thought displayed by a few individuals has revitalized and expanded knowledge. Those individuals discovered the novel pattern and the novel detail. If in the past a few individuals were able to spark the advance of a relatively (when compared with today) small body of knowledge, then it was thought necessary, even compelling, that school systems develop an environment which will encourage positive and critical minds capable of discovering that novel pattern and that novel detail.

DeChardin (1959, p. 230), in answer to the question, posited environmental conditions conducive to the critical disposition of the mind:

> There is a danger that the elements of the world should refuse to serve the world--because they think; or more precisely that the world should refuse itself when perceiving itself through

> reflection. Under our modern disquiet, what is forming and growing is nothing less than an organic crisis in evolution.
>
> And now, at what price and on what contractual bases will order be restored? On all the evidence, that is the nub of the problem.
>
> In the critical disposition of mind we shall be in from now on, one thing is clear. We shall never bend our backs to the task that has been allotted us of pushing noogenesis onward except on condition that the effort demanded of us has a chance of succeeding and of taking us as far as possible. An animal may rush headlong down a blind alley or towards a precipice. Man will never take a step in a direction he knows to be blocked. There lies precisely the ill that causes our disquiet.
>
> Having got so far, what are the minimum requirements to be fulfilled before we can say that the road ahead of us is open? There is only one, but it is everything. It is that we should be assured the space and the chances to fulfill ourselves, that is to say, to progress till we arrive (directly or indirectly, individually or collectively) at the utmost limits of ourselves. This is an elementary request, a basic wage, so to speak, veiling nevertheless a stupendous demand. But is not the end and aim of thought that still unimaginable farthest limit of a convergent sequence, propagating itself without end and even higher? Does not the end or confine of thought consist precisely in not having a confine? Unique in this respect among all the energies of the universe, consciousness is a dimension to which it is inconceivable and even contradictory to ascribe a ceiling or to suppose that it can double back upon itself. There are innumerable critical points on the way, but a halt or a reversion is impossible, and for the simple reason that every increase of internal vision is essentially the germ of a further vision which includes all the others and carries still farther on.

But the most beautiful part of this great idea was DeChardin's (1959, p. 232) conclusion: "If progress is a myth, that is to say, if faced by the work involved we can say: 'What's the good of it all?' our efforts will lag. With that the whole of evolution will come to a halt--because we are evolution." Implying that there can be no such thing as the energy of despair as Reich (1970, p. 236) has said, DeChardin (1959, p. 232) observed: "All conscious energy is, like love (and because it is love), founded on hope." This feeling of

a high sense of adventure was thought by this writer to be a vital ingredient in the interaction of a school community.

In a comment on the ingredient of the excitement of learning, Hoffer (1972, p. 22) observed:

> The central task of education is to implant a will and facility for learning; it should produce not learned but learning people. The truly human society is a learning society, where grandparents, parents, and children are students together.
>
> In a time of drastic change it is the learners who inherit the future. The learned usually find themselves equipped to live in a world that no longer exists.

Whatever existentialism is as a philosophy, it can help to clarify issues by encouraging students to honestly analyze their predicament and to aid in the formulations of solutions. The student was encouraged to define relationships between himself and his destiny. This existent individual will come to feel that he always has a task before him. He knows that it will take an effort to bring this about. He is passionately inspired to reach his goal. All tasks become possible. The process makes a student into a free man. He is aspiring. He has momentum. He is becoming. There are no restraints to his vision because he knows that every interval vision is essentially the germ of a further vision which includes all the others and carries his visions still farther on.

This illumination of hope and excitement of becoming, the existentialist philosophers said, was best brought about by encounter but without caprice. Hope and vision are inherent factors in man because man is evolution. The central task of teachers and administrators becomes a helping relationship (Combs, Avila, and Purkey, 1971) designed to help the student expeditiously utilize his unique

self which was developed through intercourse with his environment. It was this phenomenological field, ramified with millions of encounters (Skinner, 1971) which constituted a unique background of knowledge in the self. Sound educational techniques recognize the environmental influence on the developing self and seek to aid the self in developing a will and facility for learning. The review of the literature of existentialist philosophical thought with emphasis on its application to education has indicated that the existent individual was three dimensional and possessed awareness, freedom, and authenticity. His capabilities develop to their greatest extent in a climate of possibility, hope, and freedom from anxiety. It, therefore, seemed reasonable to assume that as Kneller (1958, p. 42) concluded, "the problems of human existence, its nature and meaning, become the problems of education." These assumptions, delimited as they were, became the reference point for the related literature.

Student Background Transeunts Related to Self-concept and Attitude Toward School

Two major problems that confronted the professional educator as he considered the environmental backgrounds of students dealt with: (1) isolating and understanding the background forces at work in molding individual differences, and (2) developing learning techniques which allow the student to utilize and to nurture his hierarchy of experiences, feelings, and attitudes. The essence of these problems amount to a postulation and recognition of individual human dignity. Newman and Oliver (1970, p. 33) called individual human dignity the "most fundamental value of all." Lecky (1945), too, insisted that

"the recognition of the organism itself as a determiner is merely a tardy acknowledgment of the very obvious fact that each individual evaluates the world in his own terms." Using the same frame of reference Ebel (1972, pp. 3-7) agreed that "knowledge is built out of information by thinking. It is an integrated structure of relationships among concepts and propositions. . . . A teacher can give his students information. He cannot give them knowledge. Education to Dewey (1916) was the process of learning to inquire systematically by using the method of science, and its aim was to continue the educative process. Because the existential situation constantly changes and final answers are unavailable to man, continuous learning was considered a necessity to Dewey. The best that schools could do to foster wisdom was to help students cultivate knowledge.

Each stage of development carries with it the possibilities for new ways of processing information. Olmy (1964, p. 14) wrote:

> Essentially the view of intelligence that I shall present says that intelligence, rather than being fixed by genetic factors at birth, emerges as it is nurtured. Each stage of development carries with it possibilities for the acquisition of new abilities, new ways of processing information.

Furth (1970, p. 73) called this process "general experience" while Mayer (1958, p. 72) stressed the "reconstruction of experience." Ulich (1964, p. 32) thought that a students' ability to make a decision was based on acquired "enriching experience" in the decision making and learning process.

Personal tendencies and personal characteristics also express themselves in social interaction, and the major effect of such interaction on decision making according to Maddi (1968, p. 51) was to

form the experiential basis of the "self-dynamism." Peters (1959, p. 57) commented on the lack of this quality in a student and noted that "sufferers from this malaise are victims of their own beliefs; for, in fact, they are less responsible because they believe they are." Arnold and Gasson (1954, p. 464) also observed that "what is deciding is the way in which the human being deals with his emotions, what convictions he has acquired, what principles of action he acknowledges, . . ." Personal tendencies and personal characteristics effect a student's ability to look at a problem in the same way that the teacher or another student does. Thus his decisions and ways of perceiving problems were different.

Cultural and cross cultural conditioning were found to effect decision making in relation to self-concept. Benedict (1953, p. 525) said that "a child does not make any labor contribution to our individual society except as it competes with an adult; its work is not measured against its own strength and skill but against high-geared industrial requirements." While Frank (1953, p. 135) claimed that "flexibility and social change are in America the principle sources of insecurity." Social relationships were considered of major importance in the development of self-concept by Parsons (1961, p. 170). He thought that "the exposure of the human infant to human beings, particularly the mother, . . . lays down the genetic basis of the development of his personality."

Goldstein (1939, p. 217) referred to this point of view in his study of the human as an organism and wrote that "this shows that the reflex phenomenon is not only modified by the state of the rest of the organism, . . . but that the reaction, from the very start,

depends upon the condition of a field far beyond the reflex arc." Every human encounter contributed to a unique frame of reference which molds student self-concept and thus decision making. Snygg and Combs (1949, p. 15) concluded that "to the individual himself his phenomenal field is reality, the only reality he can know."

Rousseau (1898, p. 212), observing the effects of self-concept on decision making, said that the "child" effects on adults makes him into a "mere sensuous being, swayed by purely sensuous instincts, and inaccessible to reason or conscience, and that these, when called forth by social demands, are marks of depravation and badges of unfreedom." The importance of student self-concept relative to decision making was summarized by Buber (1970, p. 56) who philosophized that "those who experience do not participate in the world. For the experience is 'in them' and not between them and the world."

Lewin, too, (1935, p. 177) concluded:

> Objectivity cannot arise in a constraint situation; it arises only in a situation of freedom. Intensive needs of the child's own freedom to set goals [i.e., make decisions] are pedagogically not an inhibition but a necessary condition to a happy separation of reality and unreality.

A student cannot be separated from his self in any learning situation Lewin indicated.

The self was considered to be one of the dimensions brought into the new encounter in the learning experience. Neff (1968, p. 32 and p. 254) addressed himself to this subject and observed that "the skills of work are as much social and interpersonal as they are physical and intellectual. . . . We have insisted that experiences of

childhood are necessary but not sufficient conditions of adult behavior." The studies indicated that decision making was tied to self-concept and that self-concept was dependent on a student's phenomenological field. But continuous learning was tied to new experiences in an existential manner through confronting problems as they arise.

A number of studies have been directed toward the possible influence of early environmental factors on the development of creativity in industry and in education. Getzels and Jackson (1962) found that mothers of high-creative children less often than mothers of high I.Q. children report worries about the dangers in the world, recollections of insecurity in their own childhood, admiration for conventional qualities in children and vigilance regarding their children's independence. Drevdahl (1964), testing psychologists, and MacKinnon (1964), testing architects, also found that their more creative subjects were given more independence and responsibility during childhood than the average child. Drevdahl (1964), however, noted that the creative psychologists reported more than average family pressure for educational achievement.

The findings in Vroom's study (1960) supported the hypothesis that the effects of participation in decision-making depended on certain personality characteristics of the participant. The evidence suggested that authoritorianism and need for independence interacted with participation in determining attitudes toward the job and motivation for effective performance. These personality characteristics were developed in a student's formative years. But Buber (1970, p. 56) observed that "the world does not participate in experience. It

allows itself to be experienced, but it is not concerned, for it contributes nothing, and nothing happens to it."

A review of the literature of the pre-school years, of family influences, and of sex influences on a student was considered essential to an understanding of background transeunts. Patterson, Choate and Brunner (1936, p. 466) observed that "it is within the family that the child learns to walk and to talk. The very expression, 'mother tongue,' implied the educational importance of the family." Eby (1931, p. 23) quoted Martin Luther as observing:

> A child, who has once become timid, sullen and dejected in spirit, loses all his self-reliance and becomes utterly unfitted for the duties of like, and fears rise up in his path, so often as any thing comes up for him to do, or to undertake. But this is not all;--for, where such a spirit of fear obtain the mastery over a man in his childhood he will hardly be able to rid himself of it to the end of his days. For, if children are accustomed to tremble at every word spoken by their father or mother they will start and quake forever after, even at the rustling of a leaf.

Negative family environmental influences were observed early in the history of education.

Jourard (1963, p. 302) commented on the importance of the pre-school years on interpersonal behavior by observing:

> Man is dependent upon his fellows for many vital satisfactions; his survival during infancy is contingent upon the care of others. As an adult, he needs the help and the responsiveness of others in order to cope with life problems and to produce or maintain his sense of security, self-esteem, and identity. . . .

This unsophisticated kind of education in the home played an important part even in societies in the process of civilization and continues to play an important role in modern, formal, systems of education. Toynbee (1960, p. 270) concluded:

> Even in educational institutions in which the official staple is book learning, the forming of habits and the training of character are still largely left to be taken care of by the spontaneous effects of the social relations between the rising generation and its elders; and what the child brings with him from his home may count for as much as what is deliberately impressed upon him at school. The importance of the home's contribution comes to light when an educational institution that has been the preserve of some privileged minority is thrown open to a wider public. One of the most effective privileges hitherto has been the privilege of being heir to a richer cultural heritage than is accessible to the unprivileged majority, and this richer heritage is transmitted through the family as well as through schools and colleges.

Finally, Maslow (1962, p. 41) spoke of the need for love which, he thought, was best filled by the family. He observed that "love is a hole which has to be filled, an emptiness into which love is poured. If this healing necessity is not available, severe pathology results." Learning, thus, has an emotional basis. Bernard (1962) confirmed Maslow's view of the role of love in pre-school years.

Bernard (1962, p. 135) concluded that a capacity for the development of intelligence was variable depending on the use to which it was put. If a child lives in an emotionally stable and intellectually stimulating environment, Bernard thought, he may increase his ability to profit from experiences. But if a youngster lived in fear or in a physically unhealthful and in an intellectually barren environment, Bernard said that "he not only does not use his capacity but by misuse or disuse some of his inherent capacity is forever lost."

Yarrow (1968, p. 269), too, found that "separation of infants from mother or surrogate tend to cause an inability to identify in their relationships with other people" thus causing dissonance in a student's phenomenological field. Phenix (1961, p. 157) considered the effects of divorce, American style, on the background transeunts

of students. He observed that "divorce makes possible a kind of serial polygomy. Such serial mating is probably even more damaging to family life--particularly to children--than ordinary polygomy." Holly (1930, p. 7) agreed that intelligence "has been modified somewhat by the kind of home in which he [i.e., student] has been living." Suzzallo (1909, p. V), too, observed that "the school can do much but there are aspects of life it cannot reach. The family has a rare power over the child." Many crucial variables in the educational process were found to interact in a way that researchers cannot take their levels as given in order to predict other factors. Two examples were illustrated here. Levin (1970, p. 63) found:

> Parents' educational expectations for a student will affect the student's performance level; but the students' performance level will also affect the parents' educational aspirations for him . . . the same is probably true of teacher expectations for pupil progress.

Donelson (1967) in a study of distinguishing variables of effective writers found that they: (1) had parents with more formal education and a higher socio-economic status, (2) were more likely to be female, college oriented, widely read, and willing to write about their personalities and self-concepts, (3) engaged in music activities and favored academic courses while ineffective writers favored vocational and liked English classes least of all, (4) owned more books and disliked formal grammar study, and (5) writing effectiveness correlated with scholastic aptitude and academic status. In all cases the home environment heavily contributed to student success.

In the dwelling place of the family, Fitzpatrick (1953, p. 77) reasoned, the mother must preserve the "fires of the religion and

culture, . . . Is it not in the interest of humanity itself that experience should be enriched and enhanced?" The essence of civilization was thought to be the home. Niblett (1955), also, included the Sunday School and the church as contributing to human character. Wynne-Edwards (1971, p. 276), in observing the impact of culture on youth, concluded that all age classes must be included "to make up a human society fully capable of exploiting its cultural heritage." But the conclusion drawn was that culture was transmitted through the process which Goodlad (1965, p. 72) described as the "centrality of the individual learner in the total educational system."

In an examination of the nature and impact of culture on education, Toynbee (1962, p. 334) observed:

> Education is a specifically human activity. Unlike other animals, man inherits something over and above what is transmitted to him automatically by physical and psychic heredity. He inherits a culture which the members of the rising generation acquire, not as an automatic birthright, but through being inducted into it by their elders. Human culture is not built into human minds; it is a mental tool that is transmitted, held, and operated by them and is detachable and variable. . . .

That culture is transmitted through early training and conditioned seemed to be the thrust of experts in the field.

Part of the total education experience, the literature showed, was the effect of the peer group on the phenomenological fields of its members. Havighurst (1962, p. 131) described this interaction:

> The peer group teaches also the adult subculture of which it is a part. Ethnic, religious, social class, and regional subcultures are transmitted through the peer group. . . . In most cases, the peer group acts to reinforce as well as to elaborate the teaching of the family in inducting the child into his society and into a given social-class position in the society. . . . While the peer group usually reinforces the way of life of different social classes, it also operated,

> in many cases, to teach social mobility. . . . He may be encouraged to acquire the value and goals of his new friends, and this may eventuate in his rising above the social position of his family.

Peer group interaction was considered vital to development of a healthy self-concept.

Berne (1961, p. 24) commented that "parent, adult, and child are not concepts like Superego, Ego, and Id . . . but phenomenological realities." Harris (1967) developed Berne's phenomenological realities into a methodological construct for individual diagnostic use thus emphasizing the idea. They were considered part of the total learning experience. Alienation or acceptance by the peer group was considered to be a vital part of the reality structure of an individual.

Feelings of adequacy or inadequacy leading to delinquency were found to be rooted in childhood experience. Fitts (1969, p. 15) wrote that the "typical delinquent subject dislikes himself and has a relatively negative self-concept--particularly regarding his behavior, his Moral-Ethical and Family Self. He is not defensive and makes little efforts to portray himself in a good light." His self-concept shows many deviant features which would indicate maladjustment which was described as similar to the broad category of personality disorders. He was described as having little real personality strength for withstanding stress and frustration. The overall picture was one of a troubled, unhappy, deviant and disturbed person who finds it difficult to cope with studies, peers, or with life was the author's conclusion.

Schafer (1967), also, found from his study that contributing factors to delinquency were: (1) lack of academic achievement,

negative attitudes toward self and community, choice of friends with similar attitudes, and withdrawal from conventional activities, (2) families contributed by creating disturbed personalities, failing to teach and enforce proper conduct, failing to provide the psychological background necessary for achievement, (3) schools contributed by creating academic failure, generating discontent and apathy among students, creating a non-realistic curriculum for non-college bound youth and by alienating failing students, (4) community contributed by a lack of interest in social organizations, a lack of adequate social services, and by an absence of coordination among youth serving agencies, and by segregation of the youth violator from the community. With the delinquent, Klausner (1968) wrote, stress-seeking may become an end in itself.

Crandall (1967, p. 9) in his study of motivational determinants found that "parents who maintain supportive, positive relationships with their children are most likely to foster beliefs in self-achievement t han are parents whose relations are punitive, rejecting, and critical." Crandall, also, concluded that the father-child interactions seemed to influence the child's internal-external controls more strongly than did mother-child relationships. However, the healthy adult, Allport (1955, p.75) concluded:

> . . . develops under the influence of value schemata whose fulfillment he regards as desirable . . . he selects his perception, consults his conscience, inhibits irrelevant or contrary lines of conduct, drops and forms subsystems of habits according as they are dissonant or harmonious with his commitments.

Male and female students were found by Parsons (1968) and Alberti (1971) to respond differently in secondary school. Girls

were apt to be relatively more docile, to conform in general according to adult expectations. The difference in this respect (Ellis, 1968) between the sexes was attributed to the fact that girls were initiated directly into the important aspects of the feminine role. Whereas the boys could not identify or emulate their fathers because his work was usually away from home; and, therefore, he was inaccessible. However, the author concluded that "farm boys tend to be 'good' in a sense in which that is not typical of their urban brothers" because they work alongside of their fathers and identify with their work.

Jourard's study (1971) of sex attitudinal differences found that attitudes of young women toward themselves were related to their disclosure to their parents, but not to disclosure to peers. High parental disclosure indicated a high self-concept. Other evidence strongly suggested that if the parents had been accepting and loving toward their children, the latter will be both secure and self-accepting. They will be loving toward their parent, and free in disclosing themselves to their parents. Simmons (1968) found that women were more self-confident, independent, purposive, had better rapport with faculty, and seemed to possess broader socio-cultural awareness than did male students. Pierce (1959) found that boys' value achievement was higher, that girl's exhibited more leadership, saw fathers as important in their lives, and were more responsible and independent. Coleman (1963, p. 217) found that it was most helpful to girls to be "born into the right family . . . in getting into the leading crowd." All of these factors, interacting one with the other, build the phenomenological field of students.

Sex of a student does make a difference as well as do socio-economic status and the attitudinal differences of peer group, parents, family relationships and community orientation. The review of the literature indicated that student contact with the environment caused each student to approach a confrontation differently and because his phenomenological field was different, each attempted his peculiarly own solution. All variables together create in a student his self-concept. Research has supported the hypothesis that there was a relationship between a student's background transeunts, his self-concept and his attitude toward school. It, therefore, seemed reasonable to explore what these relationships were to provide background for an understanding of their interactive effects on 12th grade students in the secondary schools of North Dakota.

Student Self-Concept and Attitude Toward School Related to School Climate

Much of the related literature described the interaction between teachers and their students and how this interaction affected student achievement. The teacher's own expectancies of children was found to stimulate or hinder learning. Brookover, Patterson and Thomas (1962) found a correlation between elementary students' grade point averages and the images these students perceived that their teacher had of them. Hughes (1964) reported that children learn what is expected of them, and what the level of aspiration is to which they dare aspire. Rosenthal and Jacobson (1968) found that students, more often than not, do what is expected of them.

Schwarz (1968), on the other hand, found no apparent relationship between the teacher's expectations for achievement and actual student performance. Purkey (1970) discovered a positive relationship between student academic performance and their perceptions of academic expectations. Finally, Schindler (1970) found that teachers of black elementary students were unacademically discriminatory in the treatment of these children. Teachers felt they knew what to expect of these students and the latter quickly learned what these expectations were and fulfilled them. Wilson (1971, p. 65) observed that "educative encounters are best defined as environments, having as their main substance the more stable discipline of knowledge." Gill (1971) found that a high correlation existed between a pattern of achievement and self-ideal. The literature indicated that teachers had an impact on students in many areas of interaction.

According to some researchers the teacher controlled the type of interaction within a class. Flanders (1963) reported research in which students with indirect teachers, teachers who accepted student ideas and feelings, learned significantly more in geometry and social studies than did students with direct teachers, those who gave lectures and directions. On the elementary level, Schantz (1964) found high ability students did better in science under indirect teaching methods. Gallagher and Aschner (1963) described a positive relationship between the amount of divergent questions asked by teachers and the amount of divergent thinking done by students.

Hughes (1971) found in his experiments that when a teacher promoted classrooms which provided leadership opportunities to

students, those students had significantly greater increases in achievement than did students in traditional classrooms.

That teacher attitudes had a significant effect on student achievement was the conclusion drawn by some researchers. Conway (1969) reported that he had raised the academic motivation of 25 disadvantaged 13 year olds so that they achieved academically, attended school regularly, were less disruptive, elevated self-esteem and aspirations and also altered perception of teachers and parents.

In a study of children's perceptions of their teachers' feelings toward them, Davidson and Lang (1960) found that the more positive a child's perceptions of his teacher's feelings, the better was his academic achievement. In a study dealing with slow learning elementary students, Miller (1970) reported no relationship between student perceptions of teacher attitudes and achievement. Brookover, Erickson, and Joiner (1967) also found that teachers' attitudes and opinions regarding their students had significant influence on their success in school. Whitt (1966) found that teacher attitudes toward pupil self-concepts were related to pupil behavior and student achievement.

Success or failure was shown to have a decided effect on learning. Parker (1964, p. 43) observed; as DeChardin (1959, p. 230) had philosophized, that "there is one element common to the 'little problem' solver. Each thrives on a degree of success and, in fact, neither will continue to work at the problem unless there are some tangible successes, or promises of ultimate rewards, along the way." According to Combs and Snygg (1959), people learn they are able, not from failure,

but from success. Costello (1964) found that overall, regardless of the task or the ability of the students, praise produced more improvement in performance than did blame.

Research in the area of teacher preparation and its relationship to student academic performance was an area of significant research. Humphrey (1968) found in his study of specific subject self-concept that students preferred group instruction in English but preferred individually prescribed instruction in mathematics regardless of their mathematics self-concept. Shim (1965) found no significant difference in elementary pupils' achievement to support the idea that an elementary school teacher had to be a superior student in college, have a degree, be fully certified, or to have many years of experience as far as measured pupil achievement is concerned. Collins (1967) found that a teacher's undergraduate major, degree, and collegiate institution attended all had effects on student academic achievement. Variables which were not found to have a pronounced effect on student achievement were sex, age, years of teaching experience and marital status.

A study which was somewhat related was done by Watts (1964) in which he found a negative relationship between teacher's non-teaching responsibilities and achievement of their students in basic skills. He also found a negative correlation between level of achievement and the percentage of teachers in each district who had a major demand of 10 hours a week or more on their time. Watts discovered a significant positive relationship between level of achievement and the percentage of teachers in each district who join community and social non-education organizations. There was no relationship

between "level of achievement" and age, teaching experience, overall value held on teachers' experience, degree held, years of training, recency of training, overall value held on teachers' qualification, nature of some responsibilities, overall value held on teachers' responsibility, activity in educational organizations, and overall value held on teachers' organization activity.

The teacher's choice of incentives and motivational techniques influenced learning. Renfield (1969, p. 72) observed that "some teachers who do little for most pupils do wonders for a few. The chemistry of relationships between a pupil and a teacher is infinitely complex." In a research project which was concerned with the type of teacher comment and student performance, Page (1958) found that students who received free comments (whatever the teacher felt was appropriate for that individual achieved higher than students who received specified comments (uniform comments corresponding to scores and generally thought to be encouraging). The latter, in turn, scored higher than students who received no comment. There were no differences between better and poorer students in their responsiveness to these different comment styles.

On the secondary level, Amidon and Flanders (1963) reported that students who received lectures, directions and criticism scored lower on achievement tests than did students who participated in discussions, with questions and praise from the teacher. Gehrman (1965) found a significant difference between types of test interpretation and achievement in elementary students. He concluded that positive and neutral interpretations promoted higher achievement than no

interpretation but there were no significant differences between positive and neutral styles.

Wells (1967) found, in the area of motivation and learning, a positive relationship between the areas of achievement and the challenge of failure, an interesting teacher, and praise from the teacher. A negative relationship was found between motivation and deliberate embarrassment of students by the teacher before the class, being "picked on" by the teacher, broken promises by the teacher, clowning teachers and extra-sensitive grading. Schwarz (1968), however, reported no relationship between achievement and teacher approval. The finding by Baker (1969) indicated a significant correlation between gain scores in achievement and allowance for appropriate practice, individual differentiation of material to correspond to learner's ability, and knowledge of results which conveyed feedback as to the appropriateness of a student's responses. Stein (1969) found that all types of social reinforcement which he tested (praise, correlation or disapproval) produced more academic behavior or achievement efforts than when he supplied no reinforcement at all.

Cooper (1971), too, found that praise raised task performance levels but not to the same degree as when he used the students' ideas in solving the same problem. Friedman (1965, p. 375) stated that:

> The teacher is able to educate the pupils whom he finds before him only if he is able to build real mutuality between himself and them. This mutuality can only come into existence if the child trusts the teacher and know that he is really there for him.

The teacher does not have to be continually with the child, but he must have gathered him into his life in such a way, Buber (1955)

stated, "that steady potential presence of the one to the other is established and endures." Buber urged, "Trust trust in the world, because this human being exists--that is the most inward achievement of the relation in education."

Some teacher characteristics affecting self-concept were discovered by researchers. If, as Coleman (1968) said, self-concepts are identifiable, and to a degree modifiable, then teachers have a direct role to play in assisting students in the development of positive self-concepts. One area that teachers must be sensitive to is that of the attitudes they express toward students.

The research results varied when teacher attitudes and expectations toward students were explored. Perkins (1958) studied factors which influence changes in children's self-concepts and found that the teacher's acceptance of students was not a significant factor in such changes. Davidson and Lang (1960), however, found that children's perceptions of their teacher's feelings toward them were positively and significantly correlated with student self-concepts. Brookover, Erickson and Joiner (1967) also reported that the evaluations which students felt that their teachers had made of them correlated consistently with their self-concept of academic ability. The correlation coefficient between general self-concept and self-concept of ability was reported to be .31. Over achievers got along better with teachers and most often thought that the teachers liked them in return. Rosenthal and Jacobson (1968) had shown that the expectations of teachers have significant influences on student performance. Richardson (1968) concluded that teacher's expectations can help or hinder the process of self-concept development. Miller (1970)

reported that the slow learner's perceptions of himself were unrelated to his perception of his teacher.

When a teacher became aware of how his actions could influence the self-concept of sensitive students, researchers found that teachers responded positively to fill the need. As a final statement in his study, Coombs (1958) pointed out the need for teachers who can understand and perceive how a child was thinking and feeling. Prows (1967) concluded that the teacher was a significant person in the formation of the child's self-concept and points out the importance of the teacher's sensitivity to the child and his self-concept. Coleman (1968) reported that a teacher with insight, initiative, judgment, concern and understanding can detect, and in essence, be an instrument for change in a child's view of himself. Suzzallo (1909, p. vii) concluded that "a clear understanding of underlying principles is essential to good teaching. Facts and methods are of no avail without this." Combs and Snygg (1959, p. 385) described the personal nature of the underlying principles of learning by observing that "this discovery of the personal meaning of ideas, values, experiences, or the accumulated culture of the race is the very essence of learning and the art of teaching is in helping people to make that discovery."

The school climate created by the administration and teachers and its effects on student self-concept was an area which was given considerable attention by researchers. Mitchel (1967) analyzed high school learning environments and found that student contentment with high school environment was significantly correlated with the high school characteristics index. Renfield (1969, p. 73) concluded that

"a major job of the principal is to strengthen the atmosphere of mutual confidence and helpfulness among teachers." Babcock (1967) as a result of his study urged administrators to: (1) re-examine their own concept of the central purpose of education--What is it in the minds of your teaching staffs?, (2) act upon grouping from the standpoint of helping students and not for ease of the teacher, and (3) act on the assumption that self-concept is a major factor in motivation and, therefore, in achievement.

Spaulding (1963) reported that there was a significant relationship between a student's self-concept as reported, and the degree to which teachers are calm, accepting, supportive and facilitative, and a negative relationship between a student's self-concept and teachers who are threatening, grim and sarcastic. He also found a high relationship between the pupil's self-concept and the behavior of the teacher when it involved personal and private talks with students. Coopersmith (1967) provided evidence that self-concept is fostered by teachers who provide environments which were well-structured.

It would be difficult for self-esteem to grow in an environment where there was little or no freedom of choice. Carlton and Moore (1966) have shown that freedom of self-directed dramatization improved reading ability and enhanced the self-concept of elementary students. Closely related to the notion of freedom of choice is the idea of freedom from threat. Sarason and Gordon (1953) reported that a poor performance by anxious subjects occurred only when the task was presented as a threat. Richardson (1968) concluded that one of the necessary conditions under which negative self-concepts can be changed was that of freedom from anxiety arising from threat of

de-enhancement. Bernard (1962, p. 238) spoke to the issue of a democratic approach to problems of behavior in concluding:

> In short, the teacher who helps children see a job through to completion, who does not permit them to follow their whims, and who uses a truly democratic approach to problems of behavior is helping them to live in a social world.

The literature showed that the teacher played an important role in student self-concept by developing a helping relationship with students.

A basic feeling by the teacher for the worth and dignity of students was vital in the process of a student evolving a healthy self-concept. Davidson and Lang (1960) found that when students feel that teachers valued and respected them, they were likely to value and respect themselves. As was reported earlier, Wells (1967) found a negative relationship between motivation and teachers who embarrassed students in front of class, teachers who picked on students, teachers who broke promises to students, and teachers who were sarcastic to students.

Closely related to respect was the concept of warmth. Spaulding (1963) supported the findings of previous investigators regarding positive attitudes toward self when he found significant correlations between height of the self-concept and the degree to which teachers were calm, accepting, supportive, and facilitative. Significant negative correlations were cited between the height of pupil's self-concepts and teachers who were dominating, threatening and sarcastic. Richardson (1968) described the necessity for warm and accepting relationships with others if negative self-concepts are to be changed. In this respect Niblett (1955, p. 7) observed

that "it is true that a school which is moribund can hinder some very vital kinds of learning or even make them impossible, and equally true that one which is vital can awaken talent which would otherwise have perished." But a teaching technique which may work for one student may not work for another.

Self-concept was found to be enhanced by high scholastic performance and an educational atmosphere of success rather than failure. A number of researchers (Diller, 1954; Stotland and Zander, 1958; Borislow, 1962; and Dyson, 1967) have explored the conditions under which success and failure affect a person's evaluation of himself. They shared general agreement that students who underachieve scholastically, or who fail to live up to their own academic expectations, suffer significant losses in self-esteem. In their study of the effects of stress induced by academic failure, Gibby (1967) found that bright and academically superior junior high students performed less well. They reported a negative effect of failure in both reported self-concept and measured cognitive functioning.

Just as poor performance has been shown to lower self-confidence, successful performance can raise it. Carlton and Moore (1966) found that when they allowed culturally disadvantaged children to select and dramatize stories, there were significant changes in their self-concepts, as well as improved reading ability. The changes in self-concepts were also reported as relatively permanent. The National Education Association (1963, p. 59) concluded:

> Schools have the important responsibility of creating a "tone" or atmosphere conducive to developing creative and enduring intellectual attitudes and interests. Unless students learn to enjoy learning, acquire many skills of

> learning, and have sufficient opportunity to be self-directing and self-evaluating in their learning, few things will stimulate them to make other than passive uses of their leisure time.

Emerson (1883, p. 11) in commenting on the object of education said that "education should be commensurate with the object of life. It should be a moral one; to teach self-trust; . . ." Costello (1964) found that overall, regardless of task or ability of the students, praise produces more improvement in performance than blame. Gehrman (1965) demonstrated that positive emphasis during test interpretation had a significant effect on students' self-perceptions. Richardson (1968) concluded his research by stating the need for differential tasks and a variety of activities which would give all a chance to see and appreciate their abilities and contributions to one another. Purkey (1970) conceded that if the school experience was not overpowering, a student is likely to grow in self-esteem and academic achievement. Boyke (1970) concluded that greater efforts in the development of an internal sense of responsibility for both success and failure within students might well enhance their self-concepts.

Because, as Wallace (1960, p. 23) observed, "the human organism is creative; it selects, rejects, seeks information, thinks, makes decisions, and ultimately modifies the systems of which it is a part." Payne (1887) commented that the child is therefore a learner, who educates himself under the stimulus and direction of the natural educator. Cooper (1971) demonstrated that by using students' ideas in the completion of task performance, teachers conveyed success to students and raised their self-evaluation significantly higher than praise alone had done. Hughes (1971) showed

that classes which provided sufficient leadership opportunities for their students had a significant effect on the growth of the latter's self-concepts. Niblett (1955, p. 116) concluded that "learning to judge human character, learning how to sum up a situation, learning how to make friends--all are aspects of education." Finally, White (1963, p. 92) observed that a student in addition to relevant cognitive learning also developed a sense of "interpersonal competence."

A review of the literature relating to school climate and effect on student self-concept indicated that behaviors, feelings attitudes and expectations of teachers can affect a student's level of achievement, his self-concept and his attitude toward school. It, therefore, seemed reasonable to explore what these relationships were to provide background for an understanding of their interactive effects on 12th grade students in the secondary schools of North Dakota.

Effects of School Size on Teacher Performance and Student Attitudes

Limited research conducted on the subject of school size was found to be of good quality. On the basis of data gathered in interviews, Ford (1970) found that students in small schools of 200 students or less attend much smaller classes than do students in large high schools. Students in the small high schools have considerably more time for independent study. There was much more frequent in-school and out-of-school contact among teachers and students. This contact was occasioned by large numbers of extracurricular activities for which teachers were responsible.

Ford (1970) found that teachers in the large high schools have far fewer of these activities. In addition the smallness of rural communities facilitated contacts among teachers and students which was not true in larger high schools. More than 85 per cent of the students expressed a desire to continue their education beyond high school. Ford reported that they had no aims or occupational goals established. Ford also found that teachers in small high schools were ill prepared in their teaching fields, that they gave students little or no direction, and that there was little flexibility of schedule to take advantage of small school size.

Mood (1970, p. 45) concluded, after reviewing 19 studies which dealt with the effectiveness of school service components:

> In order for school staff to have an effect upon students, it is necessary that students have physical access to such persons. And, indeed, we also find that student performance is related to some degree to contact frequency with or proximity to professional staff.

This factor was found to express itself in variables such as student-staff ratios, classroom size, and length of school year.

Anderson (1972) in his study of high school size in relation to college completion reported that the small high school (under 19 graduates per year) had a "higher proportion of withdrawers and a lower proportion of completors" from college than any other school size. This size of school also had difficulty in offering higher sequences in mathematics and science, and its students reported more difficulty in adjustment to college or university life. However, no significant differences were reported in school sizes above 20.

Slocum (1968) in his study of 30 Washington rural high schools examined the differences between farm and non-farm students in respect to social, economic, and cultural factors. The conclusions reported were that farm boys had higher aspirations than non-farm boys, while aspirations of farm and non-farm girls did not differ significantly.

Davis (1964) reported that of 1,673 seniors from 135 colleges and universities:

> All had been high-school National Merit Scholarship holders, finalists, or semi-finalists. Seventy per-cent of these students of outstanding academic aptitude had received top grades in lowest quality high schools; only 36 per-cent of them received comparable grades in the highest quality ones.

Thistlethwaite (1965) obtained similar results in a survey of 2,000 students from 140 institutions. Both of these studies also found that many of these superior young people with less than a B+ average in the high ranking schools chose not to pursue graduate study; they had underestimated their academic abilities. Both studies indicated that self-esteem and aspirations of the students from the larger high schools had been lowered because the faculties had judged them solely on the basis of the faculty members own personal and local standards.

The review of the literature indicated that school size had an effect on teachers and students through variables such as class size, availability of extra school activities, the possibility of greater participation in a smaller community or the more varied interests and greater resources available for study in a larger community. For teachers and students more frequent contact, the literature showed, prevailed in a smaller school; but in a larger

school a teacher had fewer preparations and was responsible for fewer activities. All of these variables, the research supported, affected student-teacher-school relationships and particularly the area of self-concept and attitude toward school. It, therefore, seemed reasonable to explore what these relationships were to provide background for an understanding of their interactive effects on 12th grade students in the secondary school systems of North Dakota.

CHAPTER III

DESIGN AND PROCEDURES

Method

This chapter was concerned with the description of the sample, with the procedures and instruments which were used in the collection of the data, and with the statistical treatment of the data.

Research Design and Sample Description

The design of the study called for the division of North Dakota's secondary schools into five categories based on official, 1972, enrollment figures (North Dakota State Department of Public Instruction, 1971). Accordingly, the schools were divided into: school size 1 ("over 1,000"), school size 2 (501-1,000), school size 3 (251-500), school size 4 (100-250), and school size 5 ("under 100"). From this comprehensive population the design called for a twelfth-grade, second semester, student population sample of 800 students and a sample of 200 full time faculty members who were actively engaged in the teaching-learning processes of the student sample. The student and faculty samples, therefore, numbered 160 students and 40 faculty members per school size.

To implement the design and to protect the integrity of the study, all schools within each school size were consecutively numbered for randomization purposes. Then a table of random numbers

was used to select the schools which were included in the study. Consequently, thirty-four schools (see Appendix A) were selected which included: six from size 1, four from size 2, six from size 3, five from size 4 and thirteen from size 5. Because of the limited enrollment of twelfth grade students in size five schools, more schools were included in this category. Since only four schools in North Dakota qualified for size 2, all were selected for the study.

Each superintendent of the selected schools received three letters (see Appendix B) from the researcher. One letter introduced the researcher and pointed out the need for research in the affective areas of education. This letter also informed the superintendent that his school was invited to participate in the study as a representative of one of the five categories based on school size in North Dakota. This communication also explained that if the school decided to participate, two measuring instruments would be given to a randomly selected sample of the school's 12th graders. A third measuring instrument would be given to a randomly selected sample of the school's secondary teaching staff. The time involved in completing the student questionnaires was given. The superintendent was assured that teacher and student anonymity would be maintained. If the school agreed to participate, it was asked to send a list of 12th graders to the researcher.

A second letter (see Appendix B) was written by a University of North Dakota professor, Dr. I. J. K. Dahl, which explained that research in education was necessary to answer questions as to what good education is and how good education can be achieved. He stated that the proposed research on school size and the organizational

climate of schools as related factors of student learning was an area well worth exploring. The letter ended with the hope that the chosen schools would be able to participate in providing valuable research for education in North Dakota.

A third letter (see Appendix B) was written by Mr. Harold Mickelson, Director of Secondaary Education, Department of Public Instruction, Bismarck, North Dakota. He felt that the study would be helpful to schools and to the Department especially since its purpose was to seek more information about the affective domain and thus seek to improve instruction in that area.

Additionally, each school was contacted by phone to establish rapport with school officials and to answer additional questions which the school might have concerning aspects of the study. The importance of proper test administration for retention of data purity was stressed.

Once a school agreed to take part in the study, the administrator was mailed a packet containing the inventories to be given. A cover letter was included containing instructions for administration of the instruments and, again, stressing the need for randomization and the continuing need for sample purity. The superintendent or his representative was asked to circulate forms of the Self Appraisal Inventory (SAI) and the School Sentiment Index (SSI) to the randomly selected twelfth grade students if the schools were large and to the entire class if the schools were small. These administrators were also asked to administer the Organizational Climate Description Questionnaire (OCDQ) to randomly selected members of the secondary school faculty.

The completed instruments were then placed in stamped self-addressed envelopes which were provided by the researcher and returned to him. Of those school superintendents and principals who committed themselves and their schools to participate in the study, a 100 per cent return of all instruments was achieved. All instruments which were incorrectly or incompletely filled out were discarded. Within those school sizes where a surplus of instruments occurred, the surplus instruments were randomly extracted and discarded. The final sample included 800 twelfth grade students (200 students for each of the five school sizes) and 200 secondary teachers (40 per school size).

Sources of Data

The sources of the data used in this study were the following:

1. Twelfth grade, second semester students randomly selected from representative schools were administered the instruments during the month of March, 1972.
2. Randomly selected secondary school faculty members were administered the instruments during the month of March, 1972.
3. Administration of the Self Appraisal Inventory to the selected students during the month of March, 1972.
4. Administration of the School Sentiment Index to the selected students during the month of March, 1972.
5. Administration of the Organizational Climate Description Questionnaire to selected faculty members during the month of March, 1972.

Instruments

The instruments used in this study were the Self Appraisal Inventory (SAI), the School Sentiment Index (SSI), and the Organizational Climate Description Questionnaire (Halpin, 1966).

Two of the instruments used in this study, the Self Appraisal Inventory and the School Sentiment Index, were developed by the Instructional Objectives Exchange (1970a, 1970b). The Instructional Objectives Exchange (IOX) was established by the Los Angeles Center of the University of California for the Study of Evaluation to:

1. Serve as a clearinghouse through which the nation's schools could exchange instructional objectives.
2. Collect and develop measuring techniques suitable for assessing the attainment of the objectives available through the Exchange.
3. Develop properly formulated instructional objectives in important areas where none currently exist.

Development of the IOX instruments, used in this study, was supported by the combined efforts of a number of state Title III programs. The Title III officials of these state programs, recognizing the lack of affective objectives measures which might be used in connection with educational needs assessment and evaluation enterprises in their states, cooperated to support development of objectives and measuring devices by the IOX (1970a, 1970b).

In January, 1970, representatives of Title III programs in approximately forty states gathered for a meeting in Washington, D. C. to discuss the availability of objectives and measuring

devices which might be used for their educational needs assessments and evaluations, particularly in the affective domain. Representatives of the IOX (1970a, 1970b) joined with those educators on that occasion to indicate that after approximately eighteen months of nationwide searching, only a few affective objectives and measures had been located by the Exchange. It became apparent that if rapid progress toward development of affective objectives and measures was to be made, some individual or agency would systematically have to undertake the development work.

The Title III representatives decided to pool certain of their financial resources and cooperatively support a development project by the IOX (1970a, 1970b). The assignment was to produce objectives and measures which might be employed for educational needs assessment and education evaluation in specific affective areas. After considerable discussion regarding the affective dimensions most in need of assessment, two high priority affective areas were identified, namely, the learner's (1) self appraisal and (2) attitude toward school. IOX was commissioned to develop a number of objectives in these two fields and to make these available, not only to the Title III projects, but to other educators in need of such measures.

Because development efforts were to focus on the preparation of objectives and measures which could be used to assess the quality of an educational program, e.g., a program intended to improve learners' self concepts and attitudes toward school, the IOX (1970a, 1970b) had one significant advantage over predecessors

who had developed similar or related measures. It did not have to defend the validity of a given self concept or attitudinal measure for an individual child. The major focus was in the area of developing measures to be used for group assessment purposes. Therefore, some aberrance in the individual's responses to the measures could be tolerated, since for the most part, the devices would be employed with groups.

The approach used by the IOX (1970a, 1970b) to develop objectives and measures was predominantly a criterion-referenced measurement approach, in which an objective was formulated, as clearly as possible, and then measures were devised to assess the attainment of the objective. The emphasis was on the congruence between a measurable, stated objective and the measuring devices based on that objective. However, norm referenced data on the IOX instrument was reported recently by Popham (1972). This information was presented in Table 1. The internal consistency and test-retest stability indexes, as reported, were recognized as being substantive for measures of affective constructs. Popham (1972, p. 11) noted, however:

> Educators who have been accustomed to expect reliability coefficients of approximately .80-.90 must recall that one might anticipate more stability and perhaps more internal consistency from a measure of mathematical competency or intellectual aptitude than from a measure of one's more vacillating self-esteem or attitude toward school.

The Self Appraisal Inventory by the Instructional Objectives Exchange (1970a) was a direct self report test designed to measure positive self concept. It was available in three levels: primary, intermediate, and secondary. In this study the secondary level was used with students in grade 12 of the research population.

TABLE 1

INTERNAL CONSISTENCY AND STABILITY COEFFICIENTS FOR THE IOX INSTRUMENTS*

Name of Instrument	Internal Consistency Index r	Test-Retest Stability r
School Sentiment Index (Total)	.88	.49
Teacher:		
Mode of Instruction	.73	.68
Authority and Control	.71	.65
Interpersonal Relationships	.76	.81
Learning	.68	.62
School Social Structure and Climate	.77	.64
Peer	.71	.71
General	.79	.68
Self Appraisal Inventory (Total)	.75	.87
General	.60	.67
Peer	.61	.62
Scholastic	.72	.53
Family	.74	.70

*Popham (1972)

The secondary level SAI contained 80 statements which were to be item tests requiring yes-no responded to by students to indicate strong agreement, agreement, disagreement or strong disagreement to each. This self report device attempted to secure a student's

responses to questions which pertain to four aspects of the self concept. Three of these four dimensions (family, peer, scholastic) were viewed as arenas in which one's self concept has been (or is being) formed. A fourth dimension reflects a more general, global estimate of self-esteem. Examples of each dimension (for which subscale scores were obtainable in the inventory) are (1) General: "I can always be trusted." (2) Family: "I seldom act like my family thinks I should." (3) Peer: "Most children have fewer friends than I do." (4) Scholastic: "School work is fairly easy for me." A composite score provided a global estimate of self concept.

The School Sentiment Index by the Instructional Objectives Exchange (1970b) was a direct self report test designed to measure attitudes toward school in general and toward several dimensions of school. Primary, intermediate, and secondary level forms were available but the secondary level SSI was used in this study with the same grade 12 students as was the SAI.

The School Sentiment Index consisted of 83 statements regarding various aspects of school, to which students responded by indicating either strong agreement, agreement, disagreement or strong disagreement to each. This self report device attempted to secure a student's responses to statements which pertained to five aspects of attitude toward school. Examples of each dimension are: (1) Teacher: "My teachers give assignments which are too difficult," (mode of instruction); "My teachers allow students some choice in what they study in class," (authority and control); "My teachers are interested in the things I do outside of school," (interpersonal relationships). (2) Learning: "I often buy books with my own money."

(3) School social structure and climate: "I enjoy the social life here." (4) Peer: "Students here aren't very friendly." (5) General: "Each morning I look forward to coming to school." A composite score provided a global estimate of self-concept.

The faculty instrument used in this study was Halpin and Croft's Organizational Climate Description Questionnaire (OCDQ), Form IV (Halpin, 1966). The Halpin and Croft's instrument contained sixty-nine statements. Each pertained to a specific interaction between the principal and the teacher or among the teachers themselves. The teachers were asked to respond to each statement by indicating how frequently they felt that the particular interaction occurred in their school. The completed questionnaires were grouped by school and then regrouped by school size. They were then scored and analyzed to find indications of the organizational climate of the school size.

Halpin and Croft began organizing the questionnaire (OCDQ) by analyzing over 1,000 possible items. The first screening procedure included eliminating items of questionable clarity and possible redundancy. Then each item was re-examined so that those that possessed high affective tone or might invite a socially desirable response were excluded. This content analysis reduced the number of items to 600 (Halpin and Croft, 1963).

The 600 items remaining were sorted and divided into four different forms of 150 each for trial application in 17 selected schools that were chosen for their heterogeneous characteristics. An item analysis of the four versions was conducted and items eliminated that did not display a large variance across schools

and a minimal variance within schools. This was necessary for the items to differentiate between schools. Two hundred fifty-seven items remained that satisfied this criteria (Halpin and Croft, 1963).

Four correlation matrices were constructed from the items remaining in each of the four forms. These correlative matrices were, then, cluster analyzed by inspection and from them sixteen groupings emerged. A content analysis based on current knowledge about organizational theory was performed. The 257 items were reduced to 160 items which were judged to have made good sense (Halpin and Croft, 1963).

Trial application, content analysis, and statistical analysis was repeated with the 160 items. Eighty items emerged as a result that seemingly measured on eight dimensions (Halpin and Croft, 1963).

The eighty items were administered to a total of 1,151 respondents in seventy-one elementary schools. The data generated was subjected to factor and content analysis which demonstrated that the eighty items could be reduced to sixty-four (Halpin and Croft, 1963). The final form for the OCDQ (see Appendix C) identified as Form IV, contained the 64 items plus five buffer items which were not scored but added only to fill out the remaining space on an IBM mark-sense card (Halpin, 1966).

In answering the questions on the OCDQ, the teachers were provided with four possible choices regarding the frequency of occurrence of each interaction. The choices were (Halpin, 1966):

1. Rarely occurs,
2. Sometimes occurs,

3. Often occurs,

4. Very frequently occurs.

The sixty-four questionnaire items were sorted by Halpin and Croft (1963) into eight groups labeled "subtests." The subtests were identified in relation to two components. One pertained to group characteristics and the other one pertained to the behavior of the leader. The eight subtests were each designated with a word that would suggest the behavior dimension which it seemed to measure. The two component groups and a description of the behavior dimensions were described as:

Teachers' behavior (Halpin, 1966, p. 150):

1. Disengagement refers to the teachers' tendency to be "not with it" and the group "not in gear." This corresponds to the concept of "anomie." This subtest is concerned with the teachers' behavior in a task-oriented situation.
2. Hindrance reflects the teachers' feeling of being burdened with tasks construed by them as being busy-work. A high score suggested that the teachers perceive their principal as hindering their work.
3. Esprit refers to the morale. The teachers perceive their social needs as being satisfied and at the same time enjoying a sense of accomplishment.
4. Intimacy indicates the degree of the teachers' friendly relations with each other. This dimension measures social needs-satisfaction but not necessarily task-accomplishment.

Principal's behavior (Halpin, 1966, p. 151):

5. Aloofness refers to the principal's behavior which is formal and impersonal. The principal likes to go by rules and policies. His behavior is nomothetic rather than idiosyncratic.
6. Production emphasis is characterized by close supervision of the staff. The principal is highly directive and is not sensitive to feed back from the staff.
7. Thrust refers to behavior by the principal which is characterized by his evident effort in trying to "move the organization." The principal does not motivate the teachers with close supervision but he attempts to do

so by setting an example. His behavior is task-riented but he remains to be viewed favorably by the teachers.

8. Consideration is the indication of the principal's ability to treat teachers "humanly."

Each questionnaire item was unique to a particular subtest. The number of items for a subtest varied from six in the Hindrance and Consideration subtests to ten in the Disengagement and Esprit subtests (see Appendix C). The OCDQ was scored on the basis of these subtests.

Using the split-half method and the odd-even methods, Halpin and Croft (1963) summarized the reliability coefficients for the OCDQ subtests. Their data was presented in Table 2.

TABLE 2

ESTIMATES OF INTERNAL CONSISTENCY FOR THE EIGHT OCDQ SUBTESTS

OCDQ Subtest	Split-Half N=1151	Respondent Odd-Even N=71
1. Disengagement	.73	.59
2. Hindrance	.68	.54
3. Esprit	.75	.61
4. Intimacy	.60	.49
5. Aloofness	.26	.76
6. Production Emphasis	.55	.73
7. Thrust	.84	.75
8. Consideration	.59	.63

Statistical Treatment

Research question number one, student self-concept and attitude toward school relating to school climate, was treated statistically through the use of canonical and zero order correlations. The canonical correlation technique was used to determine the interrelationships between the eleven student self-concept and attitude toward school variables and the eight school climate variables. According to Cooley and Lohnes (1971) and Tatsuoka (1971) a canonical correlation was the maximum correlation between linear functions of the two vector variables. Beebe (1972, p. 42) pointed out:

> After that pair of linear functions that maximally correlates have been located, there may be additional pairs of function and maximally correlate, subject to the restriction that the functions in each new pair must be correlated with all previously located functions. That is, each pair of functions is so determine as to maximize the canonical correlation (R_c) between functions, subject to the restriction that they be entirely orthogonal to all previously derived linear combinations. Besides the canonical correlation coefficient (R_c), interest centers on the interpretation of the canonical factors and the weights associated with each of the variables.

Research questions two and three were treated statistically through the use of a one-way analyses of variance. Multiple regression analysis was used to treat questions four and five.

In reporting the results of the statistical analysis, the .05 level was noted; but where levels of significance were greater than .01, the .01 level was noted.

CHAPTER IV

ANALYSIS OF THE DATA

This study was concerned with ascertaining whether the size of secondary school enrollment, school climate, a student's sex, and student background variables effect student self appraisal and student attitude toward school.

As reported in Chapter I, the subjects for this study were two hundred teachers and eight hundred students representing thirty-four randomly selected North Dakota secondary schools. The schools were categorized into five groups according to secondary school enrollment. Consequently one hundred sixty students and forty teachers composed each of five categories, size 1 ("over 1,000"), size 2 (501-1,000), size 3 (251-500), size 4 (100-250), and size 5 ("under 100"). Students and teachers within each school size were randomly selected to protect the integrity of the sample.

The findings were presented in the order of the research questions listed in Chapter I. The F test derived through analysis of variance was employed for comparison on the treatment means. The canonical correlation technique was used to statistically analyze research question number one. Research questions two and three were treat statistically through the use of a one-way analysis of variance. Multiple regression analysis was used to treat research questions four and five. In reporting the results, the .05 and .01 significance levels were noted.

Analysis of Relationships Between Student Self-Concept (SAI), and Attitude Toward School (SSI) and the School Climate (OCDQ)

The student instruments (SAI, SSI) and the corresponding secondary faculty instrument (OCDQ) were analyzed to determine possible relationships between student variables and teacher variables.

A correlation matrix was provided for the student dimensions and for faculty dimensions showing the inter-correlations of the eleven predictor variables and the eight criterion variables. The correlations were Pearson product-moment correlations and were obtained as part of the multivariate analysis. Since the variables were numbered in each of the correlation matrices, the following interpretation was given:

Student dimensions

1. Teacher--Mode of Instruction (SSI)
2. Teacher--Authority and Control (SSI)
3. Teacher--Interpersonal Relationships (SSI)
4. Learning (SSI)
5. School Social Structure and Climate (SSI)
6. Peer (SSI)
7. General (SSI)
8. Peer (SAI)
9. Family (SAI)
10. School (SAI)
11. General (SAI)

Faculty dimension:

I. Disengagement

II. Hindrance

III. Esprit

IV. Intimacy

V. Aloofness

VI. Production Emphasis

VII. Thrust

VIII. Consideration

Test of Hypothesis 1

To test the hypothesis of the relationship between student and teacher variables, canonical correlations between the eleven student dimensions (SSI, SAI) and the eight school climate dimensions (OCDQ) were computed for the thirty-four schools in the sample. Prior to the canonical comparisons, Pearson product-moment correlations between the eleven individual student dimensions (SSI, SAI) were determined and reported in Table 3. Pearson product-moment correlations between the eight individual faculty dimensions were presented in Table 4.

Pearson product-moment correlations between the eleven student variables (SAI, SSI) and the eight faculty variables (OCDQ) were determined and reported in Table 5. To test the significance of the relationship between the eight teacher dimensions (OCDQ) and the eleven student dimensions (SSI, SAI), canonical correlations were calculated. The test of significance of the canonical roots was performed and presented in Table 6. As evidenced in the table, only the first canonical root was significant ($p=.023$). Therefore, only the first canonical

TABLE 3

CORRELATION MATRIX OF SCHOOL SENTIMENT INDEX (SSI) AND SELF APPRAISAL INVENTORY (SAI) DIMENSIONS AND SCORES AS REPORTED BY THE STUDENTS (N=800)

SSI and SAI Dimensions	1	2	3	4	5	6	7	8	9	10	11
Teacher (SSI)											
1. Mode of Instruction		.436	.555	.578	.685	.635	.688	.357	.455	.435	.245
2. Authority and Control			.652	.574	.239	.113	.562	.222	.461	.447	.333
3. Interpersonal Relationships				.424	.452	.257	.569	.390	.444	.581	.256
4. Learning					.028	.172	.455	.179	.090	.415	.159
5. School Social Structure						.662	.721	.433	.465	.396	.300
6. Peer							.374	.223	.444	.213	.177
7. General								.488	.389	.501	.344
Self Appraisal Inventory											
8. Peer									.671	.688	.783
9. Family										.493	.713
10. School											.708
11. General											

TABLE 4

CORRELATION MATRIX OF OCDQ DIMENSION SCORES AS REPORTED BY THE TEACHERS (N=200)

OCDQ Dimensions	1	2	3	4	5	6	7	8
Teacher Behavior:								
1. Disengagement		.519	-.650	.016	.039	-.180	-.346	-.198
2. Hindrance			-.658	-.109	.073	.075	-.251	-.295
3. Esprit				.251	-.210	.080	.500	.352
4. Intimacy					-.203	.080	.122	.220
Principal Behavior:								
5. Aloofness						.281	.170	.146
6. Production Emphasis							.390	.335
7. Thrust								.816
8. Consideration								

TABLE 5

CORRELATION MATRIX OF STUDENT VARIABLES AND FACULTY VARIABLES

Dimensions	Disen-gagement I	Hindrance II	OCDQ Esprit III	OCDQ Intimacy IV	OCDQ Aloofness V	OCDQ Production Emphasis VI	OCDQ Thrust VII	OCDQ Consider-ation VIII
School Sentiment Index								
Teacher (SSI)								
Mode of Instruction	.191	.109	-.231	-.149	-.294	-.408	-.338	-.354
Authority and Control	.257	-.020	-.176	.039	-.165	.022	-.174	-.148
Interpersonal Relationships	.191	.162	-.268	.164	-.184	-.083	-.343	-.338
Other (SSI)								
Learning	.235	.011	-.097	.073	-.111	-.062	.043	.114
School Social Structure and Climate	-.068	-.164	-.111	-.096	-.259	-.392	-.202	-.194
Peer	.193	.049	-.283	-.269	.008	-.398	-.293	-.260
General	-.104	-.130	-.132	-.036	-.336	-.132	-.162	-.170
Self Appraisal Inventory								
Peer	.059	.291	-.421	-.053	-.039	-.056	-.339	-.203
Family	.199	.320	-.473	-.261	.039	-.131	-.382	-.363
School	.290	.348	-.507	-.044	-.178	-.071	-.199	-.181
General	.300	.359	-.509	-.095	-.056	-.110	-.394	-.297

TABLE 6

TEST OF SIGNIFICANCE OF THE CANONICAL ROOTS

	Factor I	Factor II	Factor III	Factor IV	Factor V	Factor VI	Factor VII	Factor VIII
Roots	.737	.578	.489	.413	.285	.207	.145	.082
Chi Square	32.076	20.718	16.103	12.798	8.040	5.566	3.746	2.042
Degrees of Freedom	18.000	16.000	14.000	12.000	10.000	8.000	6.000	4.000
Probability	.023*	.192	.308	.385	.626	.697	.713	.731

*Significance level >.05

factor was presented (Table 7). To facilitate analysis of the data, this column was ranked according to high positive and low negative canonical correlations and reported a second time in Table 8. An inspection of Table 8 indicated that the student variables (SSI) which contributed on the high positive side to student attitude toward school were General (.368) and Interpersonal Relationships (.337). While self-concept (SAI) was enhanced most positively by the variables, Scholastic (.436) and Family (.388). The teacher variable, Thrust (.655), was the high positive factor in the school climate (OCDQ). In North Dakota, the data indicated, these were the factors which contributed to a well functioning school system.

The low, negative factors which were found to hinder students and teachers in personal and academic pursuits were the variables, Mode of Instruction (-.319, SSI), General (-.467, SAI), and Esprit (-.579, OCDQ). The data indicated that these latter factors when present in a school contributed toward an unhealthy school system in North Dakota.

Analysis of the Relationships Between School Climate and Size of School

Test of Hypothesis 2

To test the hypothesis of the relationship between school size and teacher perception of school climate, a one way analysis of variance was employed. For each category of school size and for each dimension of the OCDQ, means, standard deviations, and F ratios were determined. These findings were reported in Table 9. To be significant at the .05 level with 4 and 799 degrees of freedom, an F ratio

TABLE 7

TABLE OF STANDARD CANONICAL PRODUCTS

Dimensions	Canonical Products
School Sentiment Index	
Teacher	
Mode of Instruction	-.319
Authority and Control	-.136
Interpersonal Relationships	-.337
Learning	.140
School Social Structure and Climate	.107
Peer	-.101
General	.368
Self Appraisal Inventory	
Peer	-.177
Family	.388
Scholastic	.436
General	-.467
Organizational Climate Description Questionnaire	
Teacher Behavior	
Disengagement	-.259
Hindrance	-.291
Esprit	-.579
Intimacy	-.098
Principal Behavior	
Aloofness	-.239
Production Emphasis	.009
Thrust	.655
Consideration	-.131

TABLE 8

TABLE OF RANKED STANDARD CANONICAL PRODUCTS

Dimensions Student Variables	Ranked Canonical Products
School Sentiment Index	
General	.368
Interpersonal Relationships	.337
Learning	.140
School Social Structure and Climate	.107
Peer	-.101
Authority and Control	-.136
Mode of Instruction	-.319
Self Appraisal Inventory	
Scholastic	.436
Family	.388
Peer	-.177
General	-.467
Teacher Variables	
Thrust	.655
Production Emphasis	.009
Intimacy	-.098
Consderation	-.131
Aloofness	-.239
Disengagement	-.259
Hindrance	-.291
Esprit	-.579

TABLE 9

MEANS, STANDARD DEVIATIONS AND F RATIOS FROM THE ANALYSIS OF VARIANCE FOR DIMENSION SCORES OF THE OCDQ BY SCHOOL SIZE (N=200)

Dimension	School Size 1. Over 1,000 Mean	SD	2. 500-1,000 Mean	SD	3. 251-500 Mean	SD	4. 100-250 Mean	SD	5. Under 100 Mean	SD	F Ratio	Significance
Teacher Behavior:												
Disengagement	17.20	3.47	16.92	3.78	17.20	4.43	18.65	4.50	16.92	4.74	1.18	NS
Hindrance	11.90	2.29	11.42	2.25	12.22	3.05	11.65	2.63	11.10	2.86	1.07	NS
Esprit	27.27	4.40	27.10	3.79	24.38	5.08	26.75	4.17	26.35	5.00	2.69	.05
Intimacy	16.90	2.68	17.30	3.11	16.92	2.40	18.17	3.29	16.95	2.82	1.42	NS
Principal Behavior:												
Aloofness	18.95	3.14	18.02	2.51	18.65	3.59	17.72	2.87	17.60	2.51	1.58	NS
Production Emphasis	16.15	2.67	16.52	2.74	15.33	3.24	16.13	3.58	12.90	3.08	8.87	.01
Thrust	26.00	4.64	25.50	5.24	21.42	6.68	22.07	6.28	22.55	5.51	5.36	.01
Consideration	12.13	3.47	13.38	2.86	10.17	2.93	11.10	3.29	11.60	3.36	5.57	.01

of 2.41 was needed, while significance at the .01 level required an F ratio of 3.41.

In an analysis of the data, no significant relationships were noted in the Disengagement, Hindrance, Intimacy, or Aloofness dimensions of the OCDQ. But a significant relationship (.05 level) was noted for the teacher dimension, Esprit. Examination of the means indicated that the highest levels for this dimension were reported by teachers in size one, over 1,000, schools. The lowest levels of esprit were reported for schools of size three, 251-500. The results indicated that teachers from size 1 and size 2 schools had the highest school spirit while those teachers from size 3 schools had significantly lower school spirit. Esprit (Table 8), it was noted, does not correlate positively with student variables in a good school in North Dakota.

A significant F ratio (8.87) at the .01 level was noted for the teacher dimension, Production Emphasis. An examination of the means indicated that the highest levels of this dimension were found in school size two, 501-1,000, followed closely by school size one, over 1,000. Production emphasis was lowest in schools of under 100. The results indicated that principals in size 2 schools were viewed as more highly directive, communicated in only one direction, and were not sensitive to feedback from the staff.

A significant F ratio (5.36) at the .01 level (Table 9) was noted for the school climate dimension, Thrust. An examination of the means indicated that the highest levels of this dimension were found in school size one followed by school size two. Thrust was lowest in school size three. Principals in school size 1 were

characterized significantly more so by teachers as being starkly task oriented and as attempting to move the organization through his personal example. Thrust (Table 9) correlated with student variables in producing better self-concepts and student attitude toward school.

Concerning the school climate dimension, Consideration, a significant relationship (5.57) at the .01 (Table 9) level was noted. An examination of the means indicated that the highest levels of this dimension were reported by teachers from school size two, 501-1,000, and lowest consideration was reported for school size three,251-500. Teachers in school size 2 viewed their principal as being more "human," as trying to do something extra for them in human terms. Teachers in size 3 schools viewed their principals as being more inconsiderate in these terms.

In summary, a significant relationship between school size and teacher perception of school climate did exist in the dimensions, Production Emphasis, Thrust, and Consideration.

Analysis of the Relationship Between School Size and Student Variables (SAI, SSI)

Test of Hypothesis 3

To test the hypothesis of the relationship between school size and student variables (Table 10), students were grouped by school size. A one-way analysis of variance was employed to compare a student's perception of school and self by school size. For each school size, means, standard deviations, and F ratios were determined. These findings were reported in Table 10. To be significant at the .05 level with 4 and

TABLE 10

MEANS, STANDARD DEVIATIONS AND F RATIOS FROM THE ANALYSIS OF VARIANCE FOR DIMENSION SCORES OF THE SCHOOL SENTIMENT INDEX AND THE SELF APPRAISAL INVENTORY (N=800)

Dimensions	School Size 1. Over 1,000 Mean	SD	2. 501-1,000 Mean	SD	3. 251-500 Mean	SD	4. 100-250 Mean	SD	5. Under 100 Mean	SD	F Ratio	Significance
School Sentiment Index												
Teachers												
Mode of Instruction	45.541	5.265	44.969	5.230	46.739	4.136	45.900	5.527	46.994	5.044	4.381	.01
Authority and Control	25.686	3.553	25.438	6.632	25.441	3.343	25.662	3.995	25.650	3.804	.184	NS
Interpersonal Relationships	30.340	4.516	30.063	4.790	30.447	4.083	31.125	4.932	30.550	5.701	1.05	NS
Other												
Learning	17.843	2.803	17.450	2.783	17.304	2.564	17.394	2.661	17.550	2.562	.949	NS
School Social Structure and Climate	49.013	6.817	48.250	7.321	52.429	6.302	50.394	7.117	53.750	7.501	17.195	.01
Peer	16.233	2.820	16.512	2.890	17.236	2.602	17.125	2.903	18.337	2.768	13.498	.01
General	27.585	4.698	26.994	5.265	28.615	4.539	27.294	4.768	28.375	4.326	3.484	.01
Self Appraisal Inventory												
Peer	55.566	6.501	54.637	5.962	56.062	6.735	54.587	6.746	55.431	5.664	1.160	NS
Family	55.019	6.815	53.525	7.665	56.230	8.090	53.800	7.129	55.656	7.206	3.98	.01
School	53.679	6.587	53.819	8.464	53.894	7.037	53.194	7.246	53.575	6.950	.221	NS
General	55.201	5.936	54.619	6.353	55.789	6.185	54.281	5.984	55.319	5.031	1.614	NS

of 2.39 was required, while significance at the .01 level required an F ratio of 3.35.

In an analysis of the data no significant relationships for the (SSI) teacher dimensions, Authority and Control, Interpersonal Relationships, Other Learning, and from the SAI dimension, Peer, emerged from the study.

Significant differences were found, however, in the remainder of the data. A significant difference (.01) was noted for the SSI teacher dimension, Mode of Instruction, as reported by students. An examination of the means indicated that school size five, under 100, reported the most positive student attitude toward this dimension. School size three, 251-500, had the next highest mean. The data indicated that students in school sizes 5 and 3 had a better perception of their teachers. They felt that their teachers were more considerate, gave reasons for grades assigned, were more interested in the individual student, did not give busy work, explained assignments, and were well prepared--than did students in other school sizes (Appendix D).

A significant F ratio of 13.498 was noted for the SSI dimension, Peer. Inspection of the means indicated that students from size five schools reported the most positive attitudes in this dimension while size one schools exhibited the lowest attitudes. Students from size five schools viewed their Peer relationships as more: enjoyable when working together in school, conducive to making friends, and open and friendly. Size 1 schools viewed these Peer relationships in the most negative manner.

Concerning the SSI dimension, General, an examination of the means revealed that a significant relationship existed within this dimension at the .01 level with an F ratio of 3.484. Students from size three schools followed closely by students from size five schools exhibited the most positive relationships. In contrast the lowest mean and thus the lowest positive relationship was exhibited by students from school sizes one and two. The data indicated that students from size 3 and from size 5 schools more often viewed themselves as: doing their best in school, looking forward to coming to school, happy while in school, and wanting to go to school (Appendix D).

Again, on the dimension, (SAI), Family, an F ratio of 7.206 significant at the .01 level was noted. An examination of the means revealed that students from school size three showed the highest positive mean values followed by school size five. The data indicated that students from school sizes 3 and 5 more often thought that their families viewed them as: being able to disagree with them, acting in an acceptable manner, doing their share of the work, being happy doing things with the family, and having good ideas (Appendix D).

Analysis of the Relationship Between Student Variables and Student Background Transeunts

Each student who completed the self-report devices, the SSI and the SAI, was also asked to complete a biographical data, or student background questionnaire. This form was included as an attempt to answer questions concerning the relationship between school sentiment, self-appraisal, and student background.

TABLE 11

GROUPED MEANS AND STANDARD DEVIATIONS OF STUDENT BACKGROUND VARIABLES (N=800)

Background Transeunts and Effects	Mean	S.D.
Participation:		
Sports	.528	.500
Music	.451	.498
Debate	.046	.210
Student Council	.130	.337
Journalism	.175	.380
Drama	.236	.425
FFA-FHA	.151	.359
Parents' Occupation:		
Business	.193	.395
Farmer	.395	.489
Laborer	.195	.396
Professional	.093	.290
Other	.179	.383
Career Plans:		
More Education	.720	.490
Going into business	.043	.202
Going to work	.239	.427
Other	.091	.288
Work Experience:		
Farm	.444	.497
City	.433	.511
Household	.328	.523
Don't work	.091	.288
Size of Family:		
Number in family	3.900	3.922
Order of Birth	3.036	4.098
Scholastic Standing:		
Upper one-half of class	.699	.459
Head of Household:		
Father	.869	.359
Mother	.110	.313
Other	.023	.152

Test of Hypothesis 4

To test this hypothesis, a multiple regression analysis was employed to compare selected singular and multiple aspects of student background to levels of school sentiment and self-appraisal as reported on the SSI and the SAI. These findings were reported in Tables 11 through 25.

Means and standard deviations of individual background variables were reported in Table 11. The means can be interpreted as percentages except for the dimension, Size of Family. This dimension may be interpreted as an average. Grouped means and standard deviations of the School Sentiment Index and the Self Appraisal Inventory student subscales were reported in Table 12. Point-biserial and Pearson product-moment correlations of student background variables and subscale scores for the School Sentiment Index were reported in Table 13. Multiple correlations, F ratios, and significance levels for each dimension of the SSI and SAI were reported in Tables 14 through 25 and were reported, also, in the following paragraphs to facilitate interpretations of Tables 14 through 25.

To be significant at the .05 level the effect, Participation, with 7 and 799 degrees of freedom needed an F ratio of 2.03 while significance at the .01 level required an F of 2.68. To be significant at the .05 level, the effect, Parents' Occupation, with 4 and 799 degrees of freedom needed an F of 2.39, while significance at the .01 level required an F of 3.35. To be significant at the .05 level, the effects, Career Plans and Work Experience, with 3 and

TABLE 12

GROUPED MEANS AND STANDARD DEVIATIONS OF THE SCHOOL SENTIMENT INDEX (SSI) AND THE SELF APPRAISAL INVENTORY (SAI) STUDENT SUBSCALE SCORES (N=800)

Dimensions	Mean	SD
School Sentiment Index:		
Teachers:		
Mode of Instruction	46.030	5.104
Authority and Control	25.575	3.664
Interpersonal Relationships	30.505	4.834
Other Dimensions:		
Learning	17.507	2.676
School Social Structure and Climate	50.771	7.303
Peer	17.090	2.884
General	27.774	4.758
Self Appraisal Inventory:		
Peer	55.257	6.346
Family	54.847	7.451
Scholastic	53.632	7.271
General	55.042	5.925

799 degrees of freedom needed an F of 2.62 while significance at the .01 level required an F of 3.82. To be significant at the .05 level the effects, Size of Family, Order of Birth, and Scholastic Standing, with 1 and 799 degrees of freedom needed an F of 3.86 while significance at the .01 level required an F of 6.68. To be significant at

TABLE 13

MULTIPLE CORRELATIONS OF STUDENT BACKGROUND VARIABLES AND SUBSCALE SCORES FOR THE SCHOOL SENTIMENT INDEX (N=800)

Background Transeunts and Effects	Teacher Dimensions (SSI)			Other Dimensions (SSI)			
	Mode of Instruction	Authority and Control	Interpersonal Relationships	Learning	School Social Structure and Climate	Peer	General
Participation:							
Sports	-.013	-.065	-.038	-.050	.132	.133**	.000
Music	.085	.063	.085	.066	.152	.000	.085
Debate	.055	.078	.137	.078*	.090	.006	.072
Student Council	.056	.013	.048	-.015	.112	.061	.056
Journalism	.117**	.142**	.146**	.063	.177**	.119	.124**
Drama	.032	.051	.097	-.014	.159	.078	.074
FFA-FHA	.044	.068	.050	.037	.051	.047	.021
Parents' Occupation:							
Business	-.082	.007	-.058	-.062	-.031	-.024	-.058
Farmer	.105*	.034	.105*	-.025	.162**	.114**	.062
Laborer	-.005	.011	-.040	.016	-.047	.009	-.020
Professional	-.006	-.029	.010	.033	-.023	-.035	.002
Other	-.037	-.042	-.016	.043	-.079	-.087	-.007
Career Plans:							
More Education	.108**	.102*	.104**	.108*	.119**	-.026	.157**
Going into business	-.074	-.028	-.022	-.052	-.019	.004	-.020
Going to work	-.071	-.083	-.110	-.066	-.113	.022	-.137
Other	-.101	-.102	-.092	-.075	-.096	-.052	-.129
Work Experience:							
Farm	-.007	-.072	-.009	-.035	.047	.110*	-.033
City	-.086	-.038	-.073	.026**	-.058	-.079	-.062
Household	.114**	.112**	.099*	.120	.120**	-.001	.147**
Don't work	-.067	-.060	-.042	-.065	-.088	-.126	-.065

TABLE 13--Continued

Background Transeunts and Effects	Teacher Dimensions (SSI)			Other Dimensions (SSI)			
	Mode of Instruction	Authority and Control	Interpersonal Relationships	Learning	School Social Structure and Climate	Peer	General
Size of Family	-.081*	-.029	-.025	.002	-.030	-.039	.012
Order of Birth	-.040	-.018	-.030	.010	-.044	-.026	-.033
Scholastic Standing:							
Upper one-half of class	.114**	.128**	-.132**	.116**	.119**	-.038	.157**
Head of Household:							
Father	.010	-.009	-.030	-.054	.022	-.013	-.047
Mother	.028	.040	.036	.061	-.028	.026	.043
Other	-.062	-.042	.006	-.023	.017	-.019	-.008

*Significance levels >.05
**Significance levels >.01

the .05 level, the effect, Head of Household, with 2 and 799 degrees of freedom needed an F of 3.01, while significance at the .01 level required an F of 3.82.

Correlations reported in Table 13 were low due in part to the nature of the variables. That is, most transeunt variables report dichotomous information. As an example, either a student's father is or is not a farmer. Thus, the correlations in such a circumstance are point-biserial correlations. In general, point-biserial correlations tend to be lower than Pearson product-moment correlations when the Pearson correlation is applicable.

However, because of the low correlations evidenced in Table 13, a singular transeunt effect correlating either high or low on a single occasion with a dimension of the SAI or SSI even though significant at the .05 or .01 level, bore little practical meaning. But in instances where the same transeunt effect developed a pattern of high or low negative correlations on two or more occasions, the trend then became meaningful. Therefore, both high positive and low negative correlations were reported and trends noted.

Analysis of the Relationship Between Student Background Transeunts and the Teacher Dimension (SSI): Mode of Instruction

The analysis of the relationship between student background transeunts and the School Sentiment Index dimension, Mode of Instruction, was reported in Table 14. It was determined that the multiple background transeunt, Participation, was significantly related to this dimension (.01 level) with an F ratio of 2.669. The singular effect, Journalism (Table 13), evidenced the highest degree of

TABLE 14

MULTIPLE CORRELATIONS BETWEEN MODE OF INSTRUCTION DIMENSIONS (SSI) AND STUDENT BACKGROUND TRANSEUNT VARIABLES (N=800)

Source Effects	R	F	Significance
Participation	.151	2.669	.01
Parents' Occupation	.118	2.799	.05
Career Plans	.122	4.139	.01
Work Experience	.134	4.903	.01
Size of Family	.083	5.326	.05
Order of Birth	.044	1.303	NS
Scholastic Standing	.114	10.486	.01
Head of Household	.070	1.848	NS

correlation while the effect, Sports, evidenced the lowest degree of correlation (Table 13). Of the student sample 52.8 per cent reported participation in sports (Table 11) and 17.5 per cent reported participation in Journalism. The data indicated that participation in sports was negatively correlated with rapport, with teachers and with instruction generally (see Appendix D, Mode of Instruction). Students who participated in Journalism viewed Mode of Instruction in a highly positive sense (see Appendix D, Mode of Instruction).

The background transeunt, Parents' Occupation, was significantly related to the SSI dimension, Mode of Instruction (.05 level), with an F ratio of 2.799. An examination of the data (Table 13) indicated that students who identified with the singular effect, Farm, registered the highest correlations with this dimension. Table 11 indicated that

39.5 per cent of the students reported their parental occupation as "Farm." The data indicated that farmer's sons and daughters viewed teachers and instruction in a positive sense.

The multiple student background transeunt, Career Plans, also, was significantly related to the SSI dimension, Mode of Instruction (.01 level), with an F ratio of 4.139. Seventy-two per cent of the student sample (Table 11) registered a desire for continued education. This group (Table 13) registered the highest correlation (.108) while those students who conceived themselves as being in the "Other" category registered the lowest (-.101) correlation (Table 13). The data indicated that students whose career plans included more education related better to teachers and instruction. Those students with no career plans viewed teachers and instruction in a highly negative sense.

The multiple background transeunt, Work Experience, too, was significantly related to the SSI dimension, Mode of Instruction (.01 level), with an F ratio of 4.903. An examination of the correlations on Table 13 indicated that household work experience was the most closely correlated (.114) with this dimension. Table 11 revealed that 32.8 per cent of the students worked in the household. The data indicated that household work experience was the best indicator of rapport with teachers and instruction in the work experience category.

The background transeunt, Scholastic Standing, registered a significant (.01 level) F ratio of 10.486 (Table 14). Students who classified themselves as in the upper one-half of their class evidenced a correlation of .114 with the SSI dimension, Mode of

Instruction (Table 13). Of the sample of 800 students, 69.9 per cent indicated that they were in the upper one-half of their class (Table 11). The data indicated that students with higher scholastic achievement empathise more closely with the SSI dimension, Mode of Instruction (see Appendix D, Mode of Instruction).

Analysis of the Relationships Between Student Background Transeunts and Teacher Authority and Control (SSI)

It was determined that the student background transeunt, Participation, was significantly related to the SSI dimension, Authority and Control (.01 level) with an F ratio of 3.857 (Table 15). An analysis of the data in Table 13 indicated that the singular effect, Journalism, exhibited the highest correlation (.142) and that the singular effect, Student Council, obtained the lowest correlation (.013). The percentage of student participation in Journalism (Table 11) was 17.5 per cent. This data indicated that students in Journalism tended to relate more closely with the SSI teacher dimension, Authority and Control. An inspection of the ranked test items (Authority and Control, Appendix D) indicated that Journalism students felt that they have a choice in classroom study, that assignments were interesting, and that teachers were fair to them.

An analysis of the data for the student background transeunt, Career Plans, indicated a significant (.05) F ratio of 3.214. An inspection of Table 13 revealed that the singular effect, More Education, had the highest level of correlation at .102 while the singular effect, Other, had the lowest correlation with a -.102 reading. Seventy-two per cent of the sample reported more education as a

TABLE 15

MULTIPLE CORRELATIONS BETWEEN AUTHORITY AND CONTROL DIMENSIONS (SSI) AND STUDENT BACKGROUND TRANSEUNT VARIABLES (N=800)

Source	R	F	Significance
Participation	.181	3.857	.01
Parents' Occupation	.054	.534	NS
Career Plans	.109	3.214	.05
Work Experience	.137	5.171	.01
Size of Family	.031	.680	NS
Order of Birth	.000	.270	NS
Scholastic Standing	.126	13.377	.01
Head of Household	.054	1.421	NS

career plan (Table 11) while 9.1 per cent indicated "Other" as a career plan. The data indicated that students who desired more education related significantly better to the SSI dimension, Authority and Control (see Appendix D, Authority and Control).

When consideration was given to the student background transeunt, Work Experience, the data (Table 15) indicated a significant (.01) F ratio of 5.171. Data in Table 13 revealed that the singular student effect, Household, had the highest correlation (.112) with the teacher SSI dimension, Authority and Control. The lowest correlation was registered by those students who listed their family occupation as "Farm." The data indicated that farmer's sons (daughters work in the household) do not correlate well with this teacher dimension. They do not believe that teachers: allow them to be creative,

allow them to hold a different opinion, allow grade changes, or control classes. Those students who worked in the household with their mothers viewed authority and control in a positive way (Appendix D, Authority and Control).

A significant relationship (.01 level) with an F ratio of 13.377 (Table 15) was noted in the data for the background transeunt, Scholastic Standing upper one-half of class. Students who considered themselves in the upper one-half of their class scholastically related better to the SSI teacher dimension, Authority and Control. The data indicated that this group of students empathized with the dimension.

Analysis of the Relationships Between Student Background Transeunts and Teacher Interpersonal Relationships

Analysis of the relationship between the student background transeunt, Participation, and the teacher SSI dimension, Interpersonal Relationships (Table 16), indicated a significant (.01) level F ratio of 5.081. The data (Table 13) indicated the effect, Journalism, evidenced the highest correlation (.146) while sports recorded the lowest correlation (-.038) as illustrated in Table 13. The data indicated that the students who were enrolled in Journalism related best to the SSI dimension, Interpersonal Relationships, while those students who participated in sports related at the lowest level. The data indicated that journalism students saw teachers as interested in the student's outside of school activities, in what the student had to say in understanding young people, talking to students after class, interested even if the student will not go to college. Students who participated in sports saw the same teacher characteristics in a negative sense (Appendix D, Interpersonal Relationships).

TABLE 16

MULTIPLE CORRELATIONS BETWEEN INTERPERSONAL RELATIONSHIPS DIMENSIONS (SSI) AND STUDENT BACKGROUND TRANSEUNT VARIABLES (N=800)

Source	R	F	Significance
Participation	.207	5.081	.01
Parents' Occupation	.109	2.520	.05
Career Plans	.122	4.099	.01
Work Experience	.118	3.675	.05
Size of Family	.000	.488	NS
Order of Birth	.000	.724	NS
Scholastic Standing	.130	14.231	.01
Head of Household	.031	.518	NS

The student background transeunt, Parents' Occupation, data (Table 16) produced a significant (.05 level) F ratio of 2.520. The findings, as presented in Table 13, gave the singular student effect, Farm, the highest correlation (.105) and the student singular effect, Professional, the lowest correlation (.010). The data indicated that students who cited their father's occupation as "Farm" empathized to the greatest extent with the SSI teacher dimension, Interpersonal Relationships. Students with a farm background viewed their teachers as interested in them, as patient with them, as having no pets, and they do more school work than that which was assigned. Students from a professional family background viewed teachers in opposite terms (see Appendix D, Interpersonal Relationships).

The findings for the student background transeunt, Career Plans, indicated a significant (.01 level) F ratio of 4.099. An inspection of the data indicated that the student singular effect, More Education, had the highest correlation (.104) with the SSI teacher dimension, Interpersonal Relationships, and that the student singular effect, Going to Work, was low (-.110). This indicated that students whose career plans included more education related significantly better to their teachers. They viewed the teacher and instruction in positive terms. Those students who were going to work after graduation viewed teachers and instruction in more negative terms.

An analysis of the data involved in the student background transeunt, Work Experience, indicated a significant (.05 level) F ratio of 3.675. The findings as presented in Table 13 indicated that household work experience correlated highest (.099) with the SSI teacher dimension, Interpersonal Relationships, while the effect, City, produced the lowest correlation (-.073). This indicated that the personal nature of work inside the household and being able to identify with mother had transfer effect to the SSI teacher dimension, Interpersonal Relationships. Work in the city, the data indicated, does not transfer into feelings leading to positive interrelationships with the teacher or to positive feelings toward instruction.

When consideration was given to the student background transeunt, Scholastic Standing, the data (Table 16) indicated a significant (.01 level) F ratio of 14.231. An inspection of Table 13 indicated that students who considered themselves as being in the

upper one-half of their class tended to have better interpersonal relationships. They felt (see Appendix D) that their teachers were interested in what they had to say and that they had a good relationship with their teachers.

Analysis of the Relationships Between Student Background Transeunts and Sentiment Toward Learning

The findings (Table 17) for the student background transeunt, Participation, indicated a significant (.05 level) F ratio of 2.200. The data (Table 13) indicated that the student singular effect with the highest correlation was Debate (.078). The lowest area of correlation was the effect, Sports (-.050). These factors seemed to indicate that there was little transferable value from the student singular effect, Sports, to the SSI dimension, Learning, while the opposite was true for the student singular effect, Debate. Those students who participate in debate, the data indicated, liked to do homework, liked to learn in school, liked classes where they learn the most, liked doing more school work than that which was assigned, and bought books with extra money. Those students who engaged in sports took an opposite point of view (Appendix D, Learning).

The student multiple background transeunt, Career Plans (Table 17) registered a significant F ratio of 3.479 (.05 level). Examination of the data indicated that the student singular effect, More Education (Table 13), correlated the highest (.108) while the student singular effect, Other, had the lowest correlation (-.075). The data indicated that student identification with more education leading to a career stimulated the student in the pursuit of learning. He loved

TABLE 17

MULTIPLE CORRELATIONS BETWEEN LEARNING DIMENSIONS (SSI) AND STUDENT BACKGROUND TRANSEUNT VARIABLES (N=800)

Source	R	F	Significance
Participation	.137	2.200	.05
Parents' Occupation	.083	1.312	NS
Career Plans	.114	3.479	.05
Work Experience	.130	4.500	.01
Size of Family	.000	.005	NS
Order of Birth	.000	.083	NS
Scholastic Standing	.118	10.971	.01
Head of Household	.063	1.534	NS

to do more school work than that required, liked the challenge of a difficult assignment, and liked to learn. The data indicated that those students who had no definite after graduation plans viewed such learning in a negative fashion (Appendix D, Learning).

When consideration was given to the student background transeunt, Work Experience, the data (Table 17) revealed a significant (.01 level) F ratio of 4.500. An inspection of Table 13 indicated that work in the household correlated highest (.120) with the dimension. Those who do not work represented 9.1 per cent of the student population (Table 11). This group had the lowest correlation with learning (-.065). The data indicated that students who worked in the household had a positive attitude toward learning in general,

whereas, students who did not have jobs outside of school, did not like to pursue learning.

The findings (Table 17) for the background transeunt, Scholastic Standing, showed a significant (.01 level) F ratio of 10.971. Students from the upper-half of the class correlated highest (.116) with the SSI dimension, Learning. This indicated that the upper-half of the class identified best with the SSI dimension, Learning, and that those who did not think of themselves as being in the upper one-half scholastically, did not associate themselves with the learning process.

Analysis of the Relationship Between Student Background Transeunts and School Social Structure and Climate

Findings (Table 18) for the student background transeunt, Participation, indicated a significant (.01 level) F ratio of 8.962. An examination of the data (Table 13) indicated that the effect, Journalism, had the highest correlation (.177) while the effect, FFA-FGA, had the lowest correlation (.051). The data indicated that journalism students viewed the school climate as being more relaxed, as being allowed a second chance, being at ease with the school administrators, having a voice in running the school and a feeling that people care about them (Appendix D, School Social Structure and Climate).

The data (Table 18), also, indicated that the student background transeunt, Parents' Occupation, had a significant (.01 level) F ratio of 5.740. The data (Table 13) showed that all correlations were negative except the student singular effect, Farm (.162). The

TABLE 18

MULTIPLE CORRELATIONS BETWEEN SCHOOL SOCIAL STRUCTURE AND CLIMATE DIMENSIONS (SSI) AND STUDENT BACKGROUND TRANSEUNT VARIABLES (N=800)

Source	R	F	Significance
Participation	.270	8.962	.01
Parents' Occupation	.167	5.740	.01
Career Plans	.134	4.843	.01
Work Experience	.130	4.674	.01
Size of Family	.031	.735	NS
Order of Birth	.044	1.577	NS
Scholastic Standing	.118	11.543	.01
Head of Household	.031	.324	NS

student singular effect, Other, had the lowest correlation (-.079). The data indicated that those students who designated "Farm"as the parental occupation identified most closely with the SSI dimension, School Social Structure and Climate. Farm students felt, the data indicated, that they had privacy in school, that they could win at elective office, that lunch time was fun, and that they were at ease with teachers and school officials. Those students who listed "Other" as the family occupation felt negatively toward teachers, administrators, and the school climate in general (Appendix D, School Social Structure and Climate).

The findings (Table 18) for the student background transeunt, Career Plans, indicated a significant (.01 level) F ratio of 4.843. The singular student effect, More Education, showed the closest

correlation (.119) with the dimension, School Social Structure and Climate (Table 13). The singular student effect, Going to Work, received a correlation of -.113 which was significantly low. Those students who planned more education, the data indicated, viewed the school climate in more positive terms. They felt at ease with teachers and school officials, and they felt that they had a voice in running the affairs of the school which concerned them. But those students who planned to go to work after leaving school, had negative feelings about the school climate (Appendix D, School Social Structure and Climate).

The data (Table 18) concerning the background transeunt, Work Experience, showed a significant (.01 level) F ratio of 4.674. The student singular effect, Household, had the highest correlation factor (.120). It seemed that work in a household identified more closely with the dimension, School Social Structure and Climate. Students who worked in the household felt significantly better about teachers and administrators, and felt that people cared about them. Those students who did not work felt significantly less good will towards the school situation.

The findings for the background transeunt, Scholastic Standing, showed a significant (.01 level) F ratio of 11.543. The F factor which resulted in the significance was the result of the upper-half of the class correlating (.119) closely with the school social structure and climate. The data indicated that students in the upper one-half of their class felt that the school climate was more open. They identified with teachers, administrators and with the

learning process to a significantly greater degree than did students in the lower one-half of their class scholastically.

Analysis of the Relationship Between Student Background Transeunts and Peer Sentiment

Findings (Table 19) for the student background transeunt, Participation, showed a significant (.01 level) F ratio of 4.416. Inspection of the data indicated that the differences laid in the correlations (Table 13) which showed that the singular student effect, Sports, had the high correlation (.133) with the SSI dimension, Peer. The student singular effect, Music, had a zero correlation. The data indicated that those who participated in sports felt that their fellow students were friendly, that they enjoyed working with fellow students, and that school was a good place for making friends. Those students enrolled in music felt negatively toward these areas of contact (Appendix D, Peer).

TABLE 19

MULTIPLE CORRELATIONS BETWEEN PEER DIMENSIONS (SSI) AND STUDENT BACKGROUND TRANSEUNT VARIABLES (N=800)

Source	R	F	Significance
Participation	.192	4.416	.01
Parents' Occupation	.130	3.416	.01
Career Plans	.031	.203	NS
Work Experience	.118	3.784	.05
Size of Family	.031	1.216	NS
Order of Birth	.031	.553	NS
Scholastic Standing	.031	1.160	NS
Head of Household	.031	.399	NS

The data for the student background transeunt, Parents' Occupation, indicated a significant (.01 level) F ratio of 3.416. A look at Table 13 indicated that the singular student effect, Farm, had the highest correlation with the SSI dimension, Peer (.114) while the student effect, Other, had a minus correlation (-.087). The data indicated that students from the farm felt that fellow students were friendly, that they enjoyed working on class projects with other students, that they liked most of their fellow students, and they could gain entry into any social group in school. Again, the findings indicated that students whose parents' occupation was listed as "Other" held a negative view of the student social climate (Appendix D, Peer)

It was also noted that the singular student effect, More Education, had low (-.026) SSI student dimension, Peer, value.

Analysis of the Relationships Between Student Background Transeunts and School Items of a General Nature

Inspection of the data (Table 20) concerning the student background transeunt, Participation, indicated a significant (.01 level) F ratio of 2.724. The data (Table 13) indicated that the student effect, Journalism, had the highest correlation (.124) while the student effect, Sports, had the lowest correlation (.000). The data indicated that journalism students felt that they did their best in school and looked forward to coming to school each day. They, also, felt that school inspired them, and that they tried to do their best work in class (Appendix D, General). Those students who participated in sports displayed more negative feelings in these areas.

TABLE 20

MULTIPLE CORRELATIONS BETWEEN GENERAL DIMENSIONS (SSI) AND STUDENT BACKGROUND TRANSEUNT VARIABLES (N=800)

Source	R	F	Significance
Participation	.151	2.724	.01
Parents' Occupation	.077	1.121	NS
Career Plans	.170	7.852	.01
Work Experience	.158	6.738	.01
Size of Family	.000	.120	NS
Order of Birth	.031	.880	NS
Scholastic Standing	.154	20.082	.01
Head of Household	.044	.909	NS

The data (Table 20) for the student background transeunt, Career Plans, indicated a significant (.01 level) F ratio of 7.852. The high correlation (.157) was the student effect, More Education, and the low negative correlation (-.137) was the student effect, Going to Work (Table 13). The data indicated that because student plans for more education, acted as a transeunt when the SSI dimension, General, was considered. Students who planned more education identified with all aspects of school significantly better. Those students who planned to work after high school held negative attitudes toward the school climate in general.

The data (Table 20) for the background transeunt, Work Experience, indicated a significant (.01 level) F ratio of 6.738. Inspection of the data indicated that the singular student effect,

Household, with the highest correlation level (.147) contrasted sharply with the negative correlation value (-.065) attributed to the singular student effect, Don't Work (Table 13). The data indicated that work in the household had a high student transeunt effect. Students who worked in the household saw themselves as doing well in school, liking school, and wishing to go to school all year long. Again, those students who do not work held negative attitudes toward all aspects of this dimension (see Appendix D, General).

Inspection of the data (Table 20) derived from the student background transeunt, Scholastic Standing, indicated a significant (.01 level) F ratio of 20.082. The singular student effect,Upper one-half of class, had a high correlation of .157. The data indicated that a student received a high degree of transeunt effects of a general nature if he considered himself in the upper one-half of his class. These students liked school and looked forward to school each day (Appendix D, General).

Analysis of the Relationships Between Student Background Transeunts and Attitude Toward Family (SAI)

A significant difference, (.05 level) an F ratio of 2.769, was noted upon examination of the data (Table 21) concerning the multiple student background transeunt, Work Experience. The data (Table 22) indicated a correlation of .069 for the effect, Household. Work experience for the singular student effect, City,had the lowest correlation (-.079). The data indicated that those students who work in the household more often believed that they could disagree with their family, that they were a cheerful person, and

TABLE 21

MULTIPLE CORRELATIONS BETWEEN STUDENT ATTITUDE TOWARD FAMILY DIMENSIONS (SAI) AND STUDENT BACKGROUND TRANSEUNT VARIABLES (N=800)

Source	R	F	Significance
Participation	.104	1.303	NS
Parents' Occupation	.089	1.619	NS
Career Plans	.070	1.344	NS
Work Experience	.100	2.769	.05
Size of Family	.044	1.349	NS
Order of Birth	.044	1.429	NS
Scholastic Standing	.130	13.554	.01
Head of Household	.031	.237	NS

that their family loved them, trusted them, and understood them. Those students whose work experience centered in the city more often held negative attitudes towards family (Appendix D, Family).

However, the data (Table 21) for the student background transeunt, Scholastic Standing, revealed a significant (.01 level) F ratio of 13.554. The data from Table 22 indicated that being in the upper one-half of the class was the best predictor within the confines of this transeunt for positive self-concept. Students in the upper one-half of their class hold a high regard for their family and they thought that their family held them in high esteem (Appendix D, Family).

TABLE 22

CORRELATIONS OF STUDENT BACKGROUND VARIABLES AND SUBSCALE SCORES FOR THE SELF APPRAISAL INVENTORY (N=800)

Background Transeunts and Effects	Dimensions of Self-Concept			
	Peer	Family	School	General
Participation:				
Sports	.149**	.020	.032	.055
Music	.049	.048	.151	.022
Debate	.015	.026	.130	.052
Student Council	.130	.057	.126	.063
Journalism	.099	.090	.194**	.084
Drama	.096	.051	.144	.065
FFA-FHA	.027	.013	.015	.018
Parents' Occupation:				
Business	.019	-.083	.016	-.031
Farmer	.015	.045	.002	.039
Laborer	.010	.034	-.042	.008
Professional	-.022	.000	.038	.004
Other	-.027	.028	-.029	.007
Career Plans:				
More Education	.016	.061	.195**	.049
Going into business	.076	-.017	-.006	.053
Going to work	-.004	-.061	-.125	-.032
Other	-.067	-.050	-.141	-.059
Work Experience:				
Farm	.028	-.009	-.063	.063
City	-.038	-.079	-.027	-.021
Household	.023	.069*	.162**	.009
Don't work	-.001	-.030	-.059	-.042
Size of Family				
Number in family	-.031	-.041	-.045	-.012
Order of birth	-.001	-.042	-.059	-.007
Scholastic Standing:				
Upper one-half of class	.068	.129**	.360**	.076*
Head of Household:				
Father	-.039	.003	-.030	-.011
Mother	.034	-.016	.055	-.014
Other	.051	.070	.002	.086

*Significance level >.05
**Significance level >.01

Analysis of the Relationship Between Student Background Transeunts and Student Attitude Toward School (SAI)

Inspection of the data (Table 23) derived from the multiple student background transeunt, Participation, indicated a significant (.01 level) F ratio of 8.504. It became apparent when the multiple student Participation effects data (Table 22) were reviewed that the student effect, Journalism, produced the highest correlation (.194) and that the effect FFA-FHA, produced the lowest correlation (.015) with the SAI dimension, Student Attitude Toward School. The data indicated that journalism students to a greater extent felt that school work was fairly easy, that they liked their teachers, that they got good grades, and that their teachers liked them (Appendix D, Student Attitude Toward School). FFA-FHA students shared negative views toward these school dimensions.

TABLE 23

MULTIPLE CORRELATIONS BETWEEN STUDENT ATTITUDE TOWARD SCHOOL DIMENSIONS (SAI) AND STUDENT BACKGROUND TRANSEUNT VARIABLES (N=800)

Source	R	F	Significance
Participation	.264	8.504	.01
Parents' Occupation	.054	.575	NS
Career Plans	.200	10.962	.01
Work Experience	.173	8.158	.01
Size of Family	.044	1.619	NS
Order of Birth	.054	2.814	NS
Scholastic Standing	.360	118.59	.01
Head of Household	.063	1.599	NS

The data (Table 23) also indicated a significant (.01 level) F ratio of 10.962 for the student background transeunt, Career Plans. The data indicated that the high correlations for all effects (.195) in this category was the student effect, More Education, while the effect, Going to Work, and the effect, Other, evidenced minus correlations of -.125 and -.141 respectively. Again, the data seemed to single out the latter two effects because of their low correlations (Table 22) with student attitudes toward school. Students who indicated plans for more education held higher self-concepts toward school. Those students who planned to go to work after graduation and who had "Other" plans felt that they forgot most of what they learned, that they did not volunteer in school, and that they were an unhappy person (Appendix D, Student Attitude Toward School).

The data (Table 23) for the background transeunt, Work Experience, also showed a significant relationship (.01 level) with an F ratio of 8.158. An examination of the data (Table 22) showed that the student effect, Household, had the highest correlation (.162) while that for Farm was low (-.063). The data indicated that work in the household led to a higher self-concept in this area than does work in other areas. Again, the correlation data (Table 22) indicated that the effect, Don't Work, was a contributor to low self-concept with a minus correlation of -.059 with student attitude toward school. Those students who worked in the household felt to a greater extent that the school climate--its teachers and administrators--were friendly, that their school studies were meaningful, and that their teachers liked them

(Appendix D, Student Attitude Toward School). Students with a farm background more often had negative feelings toward this dimension of self-concept.

Analysis of the Relationships Between Student Background Transeunts and Student Attitudes in General (SAI)

The data (Table 24) concerning the background transeunt, Scholastic Standing, indicated a significant (.05) F ratio of 4.583. The data showed that the upper one-half of the class correlated high (.076) on the SAI General dimension of self-concept. The data indicated that students from the upper one-half of the class were satisfied with themselves, believed that they were a cheerful person, that they could be trusted, that they were popular with their own age group, that they were nice looking, and that they did not worry (Appendix D, General).

TABLE 24

MULTIPLE CORRELATIONS BETWEEN STUDENT ATTITUDES IN GENERAL DIMENSIONS (SAI) AND STUDENT BACKGROUND TRANSEUNT VARIABLES (N=800)

Source	R	F	Significance
Participation	.118	1.653	NS
Parents' Occupation	.044	.480	NS
Career Plans	.077	1.716	NS
Work Experience	.063	1.089	NS
Size of Family	.000	.118	NS
Order of Birth	.000	.039	NS
Scholastic Standing	.077	4.583	.05
Head of Household	.044	.770	NS

Analysis of the Relationships Between Student Background Transeunts and Student Peer Attitudes (SAI)

The data (Table 25) concerning the background transeunt, Participation, indicated a significant (.01) F ratio of 5.416. The data showed (Table 22) that the background transeunt, Sports, correlated (.149) highest with the dimension, Peer, and that the background transeunt, Debate, correlated (.015) lowest. The data indicated that those who participated in sports did not feel "picked on," have many friends, were not lonely, and were popular with girls. They, also, felt friendly to others and they felt that they were liked (Appendix D, Peer).

TABLE 25

MULTIPLE CORRELATIONS BETWEEN STUDENT ATTITUDE TOWARD PEERS DIMENSIONS (SAI) AND STUDENT BACKGROUND TRANSEUNT VARIABLES (N=800)

Source	R	F	Significance
Participation	.207	5.416	.01
Parents' Occupation	.044	.327	NS
Career Plans	.083	1.903	NS
Work Experience	.044	.528	NS
Size of Family	.031	.770	NS
Order of Birth	.000	.001	NS
Scholastic Standing	.070	3.696	NS
Head of Household	.031	.606	NS

Analysis of the Relationship Between the Student Variables and the Sex of the Student

The School Sentiment Index (SSI) and the Self Appraisal Inventory (SAI) results were broken down into dichotomous male-female relationships. This was done in an attempt to answer questions concerning the relationships between attitude toward school and self-concept based on sex differentials.

Test of Hypothesis 5

Accordingly, multiple regression analysis was employed to compare the differences in perception of school and self by sex. The findings were reported in Table 26. To be significant at the .05 level with one and 799 degrees of freedom, an F ratio of 3.86 was required. Significance at the .01 level required an F ratio of 6.68.

An Analysis of the Relationship Between Student Attitudes Toward School (SSI) and the Sex of the Student

An analysis of the data (Table 26) indicated a significant difference (.01 level) with an F ratio of 9.760 for the teacher dimension, Mode of Instruction (SSI), as evaluated by students. An examination of the data (Table 26) revealed that the mean for the boys was 45.487 which was significantly lower than the mean of 46.603 for the girls. The data indicated that girls related better to the teacher dimension, Mode of Instruction, than did boys. The girls saw themselves as cheerful, easy to like, liking to meet new people, a good student, popular, and having friends (Appendix D, Mode of Instruction). But the boys saw themselves in less positive terms.

TABLE 26

ANALYSIS OF THE RELATIONSHIP BETWEEN SCHOOL SENTIMENT (SSI), SELF APPRAISAL (SAI) AND SEX OF THE STUDENT (N=800)

Dimensions	Means Boys	Means Girls	R	F	Significance
School Sentiment Index					
Teachers:					
Mode of Instruction	45.487	46.603	.109	9.760	.01
Authority and Control	25.053	26.125	.151	17.628	.01
Interpersonal Relationships	29.978	31.041	.109	9.499	.01
Other:					
Learning	17.190	17.842	.122	12.145	.01
School Social Structure and Climate	49.947	51.642	.118	10.999	.01
Peer	17.220	16.952	.044	1.738	NS
General	26.988	28.603	.170	23.920	.01
Self Appraisal Inventory					
Peer	54.725	55.819	.089	6.036	.05
Family	54.411	55.309	.063	2.941	NS
School	52.780	54.533	.122	11.899	.01
General	55.034	55.051	.000	.002	NS

Inspection of the data (Table 26) related to the teacher dimension, Authority and Control, (SSI), indicated a significant (.01 level) F ratio of 17.628. The data evidenced a higher mean (26.125) for the girls than for the boys (25.053). The significantly higher mean for the girls indicated that girls related better to the teacher dimension,

Authority and Control, than did boys. The girls saw themselves in more positive terms. They felt that their families liked the way they acted, that they were good at school work, and that they were nice looking.

Considering the dimension, Interpersonal Relationships (SSI), the data showed a significant (.01 level) F ratio of 9.499. The significance factor (Table 26) lay in the difference between a high mean for girls (31.041) and a low mean for boys (29.978). The higher mean for girls indicated that girls related significantly better to the teacher dimension, Interpersonal Relationships. Girls felt that teachers were interested in their out-of-school activities and that teachers were personally concerned about them. Girls attended school events, and they felt that they had a voice in determining how the school was run (Appendix D, Interpersonal Relationships).

In an analysis of the dimension, Learning (SSI), the data evidenced a significant (.01 level) F ratio of 12.145. Inspection of the means revealed that the girls evidenced the high mean (17.842) while the boys evidenced the low mean (17.190). The data indicated that girls related to the dimension, Learning, significantly better than did the boys. Girls, more so than boys, liked to do school work, and liked the challenge of a difficult assignment. They bought more books with their own money and did more than the required school work (Appendix D, Learning).

Inspection of the data (Table 26) related to the dimension School Social Structure and Climate, showed a significant (.01 level) F ratio of 10.999. An inspection of the means revealed that the girls received the high mean (51.642) and that the boys received the low mean (49.947). The data indicated that girls related better to the

dimension, School Social Structure and Climate, than did the boys. Girls felt that the school social structure was more relaxed than did the boys. They felt that they would get a second chance from teachers and principals. Girls were more involved in school activities and followed the school rules more so than boys (Appendix D, School Social Structure and Climate).

Considering the dimension, General, the data showed a significant (.01 level) F ratio of 23.920. The data indicated a higher mean of 28.603 for the girls contrasted with a mean of 26.988 for the boys. The data indicated that girls related significantly better to the dimension, General, than did boys. Girls tried their best in school, liked school, and were happy when they were in school. They looked forward to the beginning of the school term in the fall (Appendix D, General).

An Analysis of the Relationships Between Self-Concept Items and the Sex of the Student

To test the hypothesis for the dimension, Peer (SAI), an inspection of the data (Table 26) revealed a significant F ratio of 6.036. Examination of the data showed a higher mean (55.819) for the girls than for the boys (54.725). The data indicated that girls tended to have a higher self-appraisal when considering the dimension, Peer. Girls tended to feel that they like people and get along with them. Personally they reported feeling happy about school and self and had many friends. Boys reported significantly less happiness with their peers and had fewer friends.

Inspection of the data related to the dimension, School (SAI), showed a significant (.01 level) F ratio of 11.899. The

data indicated a significantly higher mean (54.533) for the girls than for the boys (52.780). The evidence indicated that girls had a significantly higher self-appraisal when the dimension, School, was considered. Girls tended to feel that school work was easier for them, that they were good students, and that they felt comfortable and accepted in the school environment. They, also, felt that they had self-control and could respond well in class. Boys tended to feel unsure about the school, its climate, and were more unsure of their scholastic abilities.

CHAPTER V

SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

The purpose of this study was to investigate the nature and the degree of the relationship between the size of North Dakota secondary schools, the organizational climate of the schools, and the student background transeunt effects on student self-concept and attitude toward school. A secondary purpose was to discover if differences existed between school size on student and teacher dimensions, and if there were differences, then, to discover the nature of those differences. To facilitate the purpose of the study, North Dakota secondary schools were divided into five different sizes based on 1971-72 secondary school enrollment. The student sample was limited to students enrolled in second semester grade twelve in 34 North Dakota schools. The teacher sample consisted of secondary school staff who had taught the grade twelve sample.

Consequently, the following five research questions were proposed and investigated in this study:

1. Is there a relationship between student variables (student self-concept and student attitude toward school) and school climate?
2. Is there a relationship between school size and teacher perception of school climate?

3. Is there a relationship between school size and student perception of school climate?
4. Is there a correlation between student background transeunts and student variables as measured by student attitudes toward school and by student self-appraisal?
5. Is there a difference in male and female students' attitudes toward school and self-appraisal?

Self-concept of the twelfth grade students was measured by the Self Appraisal Inventory (SAI), secondary level. Students' attitude toward school was measured by the School Sentiment Index (SSI), secondary level. The preceding instruments were developed by the Instructional Objectives Exchange. The Self Appraisal Inventory is a direct self-report test dealing with self-concept along four dimensions or scales: (1) Peer, (2) Family, (3) School, and (4) General. The School Sentiment Index is a direct self-report test dealing with attitudes toward school along seven dimensions or scales: (1) Teacher-mode of instruction, (2) Teacher-authority and control, (3) Teacher-interpersonal relationships, (4) Learning, (5) School social structure and climate, (6) Peer, and (7) General. The Organizational Climate Description Questionnaire (OCDQ), developed by Halpin and Croft, was used to measure the school's climate.

The statistical procedures consisted of canonical correlations, one-way analysis of variance, and multiple regression analysis. The .05 level of significance was used for interpreting and evaluating the findings except where the significance level exceeded .01. In those instances the .01 level of significance was used.

Summary of Data and the Related Literature

The findings of this study were summarized in the same order in which the research questions were presented in Chapter IV.

Hypothesis 1--the relationship between student variables (student self-concept and student attitude toward school) and school climate.

With self-concept and student attitude toward school measured by the Instructional Objectives Exchange instruments, the canonical correlation technique was used to determine the inter-relationships between the eleven student variables and the eight school climate variables.

a. As evidenced in Table 6, only the first canonical root was significant. To facilitate analysis of the data, this column was ranked according to high positive and low negative canonical correlations (Table 8). Table 27, prepared to illucidate the findings, suggests that the school climate dimension which has the greatest positive influence on student self-concept and attitude toward school was the principal dimension, Thrust (.655). High positive correlations for student attitude toward school (SSI) was the dimension, General (.368). Family influences (SAI) was the most positive factor contributing to high self-concept of secondary school students in North Dakota.

Jourard (1936, p. 302) commented on the importance of the family as an essential factor in survival and in learning. Yarrow (1968), Maslow (1962), Bernard (1962), Holly (1930), and Levin (1970) tended to agree with Jourard on the importance of the family in development of student self-concept and attitude toward school.

TABLE 27

SIGNIFICANT HIGH POSITIVE AND LOW NEGATIVE CANONICAL CORRELATIONS DERIVED FROM UNIVERSAL DIMENSIONS OF SCHOOL CLIMATE (OCDQ) AND STUDENT SELF-CONCEPT AND ATTITUDE TOWARD SCHOOL (SSI, SAI)

.000

Negative Low Correlations	Positive High Correlations
Dimensions:	Dimensions:
SSI (Students feel)	SSI (Students feel)
Mode of Instruction (-.319)	General (.368)
"My teachers [i.e., do not] try to make their subjects interesting to me."	"Each morning I look forward to coming to school."
Interpersonal Relationships (-.337)	
"My teachers are [i.e., not] personally concerned about me."	
SAI (Students feel)	SAI (Students feel)
General (-.467)	Family (.388)
"I can [i.e., not] always be trusted.	"My family and I have a lot of fun together."
OCDQ (Teachers feel)	OCDQ (Principal behavior)
Esprit (-.579)	Thrust (.655)
"In faculty meetings there is [i.e., not] the feeling of 'let's get things done'."	"The principal sets an example by working hard himself."

.000

*Level of significance >.05

b. Factors found to collectively contribute to a negative, low correlation, thus to a negative school climate were Mode of Instruction (SSI, -.319) and Interpersonal Relationships (SSI, -.337), General (SAI, -.467) and Esprit (OCDQ, -.579).

Hughes (1964), Rosenthal and Jacobson (1968), and Purkey (1970) reported that children learn what is expected of them by teachers and peers. The findings of this study on North Dakota secondary students tend to corroborate the previous studies.

Hypothesis 2--the relationship between school size and teacher perception of school climate.

The school climate was measured by the Organizational Climate Description Questionnaire, and F ratios derived through analysis of variance were computed to test the variables. Dimensions of school size were reported in Table 28.

a. School size one (over 1,000) was found to have the highest Esprit among the teaching staff. School size one, also, was found to be high in the principal dimension, Thrust. Thrust (Table 27) correlated well with the student dimensions in North Dakota schools. Esprit (Halpin, 1966) as a staff characteristic is highly desirable in a well functioning school system. No desirable school climate characteristic emerged, the data indicated, in school sizes one, two, and three.

b. School size two (501-1,000) administrative staffs were found to be high on the dimensions, Production Emphasis and on Consideration. High production emphasis coupled with high consideration (Halpin, 1966) are compatible administrative qualities found in top administrative talent in North Dakota.

TABLE 28

SIGNIFICANT TEACHER (OCDQ) AND STUDENT (SSI, SAI) DIMENSIONS ACCORDING TO SCHOOL SIZE

School Size I (over 1000)	School Size II (501-1000)	School Size III (251-500)	School Size IV (100-250)	School Size V (under 100)
Esprit (OCDQ)*	Production Emphasis (OCDQ)**	General (SSI)**		Mode of Instruction (SSI)**
Thrust (OCDQ)**	Consideration (OCDQ)**	Family (SAI)**		School Social Structure and Climate (SSI)**
				Peer (SSI)**

*Significance >.05
**Significance >.01

Renfield (1969), Babcock (1967), Spaulding (1963), Coopersmith (1967), and Carlton and Moore (1966) had previously reported similar determinations concerning the desirability of these staff characteristics in a well functioning school system.

Hypothesis 3--the relationship between school size and student perception of school climate.

Student self-concept and attitude toward school were measured by Instructional Objectives Exchange instruments and the F test was used to test the significance of the variables. Dimensions of school climate which were significantly characteristic of a school size were illucidated in Table 28.

a. Student variables did not flourish in school sizes one and two. Mood (1970), in a related study, after reviewing 19 investigations which dealt with the effectiveness of school service components, observed that a school staff, to have an effect upon students, must be physically accessible to students and that student performance was related to contact frequency. The larger the school the lower the contact frequency. Students fared better in terms of student attitude toward school through the dimension, Family, as evidenced by the data for school size 3.

b. Students from school size five evidenced the highest student attitude toward school as measured by the dimensions, Mode of Instruction, School Social Structure and Climate, and Peer. This data indicated that small schools provided the environment which is most conducive to student growth in the affective area. Smaller schools were found to provide significantly better learning environment by Payne (1887), Cooper (1971), Hughes (1971), and Niblett

(1955) because of closer and more frequent contact between staff and student. Student self-concept and attitude toward school flourish best in secondary schools which have a population of 500 students or less the data indicated.

Hypothesis 4--correlations between student background transeunts and student variables as measured by attitudes toward school and by student self-appraisal.

To analyze the hypothesis, data derived from the student background transeunts was correlated with the data derived from the Instructional Objectives Exchange instruments. Student variables and F ratios were determined. Significant results were illucidated in Table 29 (SSI) and in Table 30 (SAI). Both the low correlation values and the high correlation values were reported for each background transeunt. Multiple regression analysis was used to treat the data. The findings were presented by student background subscale dimension.

1. Participation

a. The data concerning the background transeunt, Participation, indicated that participation in sports had the lowest transeunt value within the dimension with the notable exception of Peer value. The data from both student instruments (SSI, SAI) agreed that self-concept was enhanced to a greater degree by participation in the dimension, Sports. Debate and Music have the lowest Peer transeunt values.

b. Music was found to have no significant value either as a vehicle to build self-concept or as a vehicle to improve attitude toward school.

TABLE 29

SIGNIFICANT HIGH/LOW CORRELATIONS OF STUDENT BACKGROUND VARIABLES AND SUBSCALE SCORES FOR THE SCHOOL SENTIMENT INDEX

Background Transeunts and Effects	Teacher Dimensions (SSI)			Other Dimensions (SSI)			
	Mode of Instruction	Authority and Control	Interpersonal Relationships	Learning	School Social Structure and Climate	Peer	General
Participation:							
Sports						.133**	
Music							
Debate				.078*			
Student Council							
Journalism	.117**	.142**	.146**		.177**		.124**
Drama							
FFA-FHA							
Parents' Occupation:							
Business							
Farm	.105*		.105*		.162**	.114**	
Laborer							
Professional							
Other							
Career Plans:							
More Education	.108**	.102*	.104**	.108*	.119**		.157**
Going into business							
Going to work							
Other							
Work Experience:							
Farm						.110*	
City				.026**			
Household	.114**	.112**	.099*		.120**		.147**
Don't work							

TABLE 29--Continued

Background Transeunts and Effects	Teacher Dimensions (SSI)			Other Dimensions (SSI)			
	Mode of Instruction	Authority and Control	Interpersonal Relationships	Learning	School Social Structure and Climate	Peer	General
Size of Family:							
Less than 3.5 children							
More than 3.5 children	-.081*						
Order of Birth							
Scholastic Standing:							
Upper one-half of class	.114**	.128**	-.132**	.116**	.119**		.157**
Head of Household:							
Father							
Mother							
Other							

*Significance levels >.05
**Significance levels >.01

TABLE 30

SIGNIFICANT CORRELATIONS OF STUDENT BACKGROUND VARIABLES AND SUBSCALE SCORES FOR THE SELF APPRAISAL INVENTORY

Background Transeunts and Effects	Dimensions of Self-Concept			
	Peer	Family	School	General
Participation:				
Sports	.149**			
Music				
Debate				
Student Council			.194**	
Journalism				
Drama				
FFA-FHA				
Parents' Occupation:				
Business				
Farmer				
Laborer				
Professional				
Other				
Career Plans:				
More Education			.195**	
Going into business				
Going to work				
Other				
Work Experience:				
Farm				
City				
Household		.069*	.162**	
Don't work				
Size of Family				
Number in Family				
Order of Birth:				
Scholastic Standing:				
Upper one-half of class		.129**	.360**	.076*
Head of Household:				
Father				
Mother				
Other				

*Significance levels >.05
**Significance levels >.01

c. Debate was found to have high value in student attitudes toward learning.

d. Journalism was found to have transeunt value in the dimension (SSI), Mode of Instruction, Authority and Control, Interpersonal Relationships, School Social Structure and Climate, and General. Journalism, also, had transeunt value in the self-concept area of school (SAI). No other areas of the dimension, Participation, showed significant differences in contributions to student self-concept or to student attitude toward school. Very little literature was found on the transeunt effects of individual subjects. However, Wells (1967) found that the areas of achievement and the challenge of failure, an interesting teacher, or praise from a teacher all aided in the building of high self-concept and attitude toward school in a positive direction. He thus indicated that individual teachers regardless of subject or activity can create a positive climate for the building of positive student attitudes.

2. Parents' Occupation

a. The data indicated that the dimension, Business, had the least transeunt value in the areas of Mode of Instruction, and Interpersonal Relationships. In all other dimensions, Business as a parental occupation, had no significant effect.

b. If a student's parent were engaged in farming, the student, the evidence indicated, experienced significant transeunt effects. Farm students were amenable to the teacher dimensions, Mode of Instruction and Interpersonal Behavior. They, also, responded favorably to the School Social Structure and Climate.

A farm background, the evidence indicated, had a significantly higher peer transeunt value than did other backgrounds tested.

Parental occupation in rural North Dakota was found to have a favorable impact on student self-concept and attitude toward school. Slocum (1968), in his study of 30 Washington rural high schools, discovered that farm boys had higher aspirations and better attitudes than did non-farm boys.

3. Career Plans

a. More education as a transeunt value, the evidence indicated, was the best indicator of student success in seven of the eleven student self-concept and attitude toward school variables.

b. The dimension, Going to Work, was found to have a high negative transeunt value in the areas of interpersonal relationships, School Structure and Climate, and General.

c. Students listing Other as a career plan tended to be highly negative toward teacher Mode of Instruction and Authority and Control. The dimension, Other, also had a negative transeunt value in the area of Learning and in the self-concept area of school.

4. Work Experience

a. Work experience on a farm had a negative transeunt value in the area of School (SAI) as a self-concept builder, but farm work experience had a high transeunt value concerning the dimension, Peer (SSI), in North Dakota.

b. Student work experience in the city, the evidence indicated, had a negative self-concept transeunt value toward Family and toward Interpersonal Relationships. But student work in the city had a high positive transeunt effect on Learning.

c. Student work experience in the Household had high positive transeunt effects in self-concept building in the areas of family and school. Work in the household was also found to have high positive transeunt effects in Mode of Instruction, Authority and Control, Interpersonal Relationships, School Social Structure and Climate, and General. But those students who classified themselves as Don't Work showed high negative transeunt values in the areas of Mode of Instruction, Learning, School Social Structure and Climate, Peer, and General. Toynbee (1962) believed that man is inducted into his culture. Work experience is a part of environmental influence and, therefore, a tool, both physical and mental, which is transmitted.

5. Size of Family

a. Size of family was found to have no appreciable transeunt effect on student self-concept or attitude toward school.

6. Order of Birth

a. Order of birth in a family, the data indicated, had no positive or negative transeunt effects on student self-concept or attitude toward school.

7. Scholastic Standing

a. Being in the upper one-half of one's class, students indicated, had almost magical positive transeunt values in most dimensions of self-concept and student attitude toward all school transeunt dimensions under consideration. This student group registered high positive transeunt in the self-concept dimensions, Family, School, and General. They, also, registered in the highest transeunt dimensions of student

attitude toward school, Mode of Instruction, Authority and Control, Learning, School Social Structure and Climate, and General.

Getzels and Jackson (1962) found that mothers of high creative children less often report worries of the world or recollections of insecurity in their own childhood. High IQ children's mothers reported significantly more worry. Drevdahl and MacKinnon (1964) found that more creative psychologists and architects were given more freedom than low creative ones. Family background was found to have a significant effect on student self-concept and attitude toward school.

8. Head of Household

a. The data indicated that there were no differences in transeunt values regardless of who was head of the household.

Hypothesis 5--differences in male and female student's attitudes toward school and in self-appraisal.

To analyze the hypothesis, mean scores for both sexes on each dimension of the Instructional Objective Exchange Instruments were calculated. Multiple regression analysis was used to treat the data and F ratios were obtained. Results were reported in Table 26.

a. The data indicated that being a girl has higher positive transeunt value in all dimensions under investigation with the exception of Peer (SSI), Family (SAI), and General (SAI). Girls obtained higher significant means than did boys in the transeunt dimensions, Mode of Instruction, Authority and Control, Interpersonal Relationships, Learning, School Social Structure and Climate, and General. On the self-concept (SAI) subscales, being a girl was found to have a higher transeunt value in the dimensions, Peer and School. In summary

North Dakota twelfth grade girls were found to have significantly higher self-concepts and significantly higher attitudes toward school than did boys. Female students were found by Parsons (1968), Alberti (1971), and Ellis (1968) to conform in general according to adult expectations but boys tended to deviate from expected norms. The girls could emulate their mothers in the household, the studies concluded, but a boy had no work model to emulate because his father's job was away from home. Therefore, the studies concluded, farm boys tend to be "good" because they work alongside of their fathers.

In summary, the following major conclusions emerged from the study:

1. The most favorable combination of factors affecting student success in secondary schools in North Dakota, the data indicated, were: (1) a positive attitude toward school (exemplified by the dimension, General), (2) a high student self-concept fostered and promoted by strong, positive family ties and influence (exemplified by the dimension, Family), and (3) a principal whose behavior is characterized by his evident effort in trying to "move the organization" not by close supervision, but by an attempt to motivate the teachers through the example which he personally sets (exemplified by the dimension, Thrust). The two student factors became assets to the education environment when the Thrust factor was added to the school climate by inspirational leadership action of the principal.

Conversely, a highly negative learning situation, the data indicated, was present in a school system when (1) a student had formulated a negative attitude toward his teachers because of the mode of instruction, (2) a student had a low self-concept because he felt that he

cannot be trusted in school or at home, and (3) the teachers in the system were characterized by low esprit (teachers felt that their special needs were not satisfied and, at the same time, they felt no sense of accomplishment in their job).

2. The data indicated that school sizes one and two developed the most favorable school climate as measured by the school staff. Conversely, principals in schools of 500 students and smaller did not provide favorable school climates for teachers.

3. Schools of 500 and fewer students provided a favorable climate for a positive student self-concept and attitude toward school.

4. Student participation in sports had a high positive transeunt Peer value, but a low, negative transeunt value toward teacher instruction, authority and control, interpersonal relationships, and learning.

5. Student participation in Journalism had the highest transeunt value of all school activities. Debate and Drama follows Journalism in student transeunt value.

6. A student with a farm background had a significantly higher positive attitude toward school than did students whose parents are businessmen, laborers, professionals, or engaged in some other occupation.

7. Students who planned to continue their education had a significantly higher positive self-concept and attitude toward school than did students who planned to go directly into business, into work or into an unspecified line of endeavor.

8. Work in a household was significantly more beneficial to a student as a transeunt enhancing student self-concept and attitude toward school than was work on a farm, in a city or no work at all.

9. Work experience in a city had a high positive transeunt value toward learning in school.

10. The size of a students' family had no measurable effect on student self-concept and attitude toward school.

11. Order of a student's birth had no significant effect on his self-concept or on his attitude toward school in North Dakota.

12. If a student considered himself in the upper one-half of his class, the transeunt value significantly enhanced his self-concept and attitude toward school with the exception of his interpersonal relationships. The students in the lower one-half of the class enjoyed significantly better interpersonal relationships.

13. There were no significant differences in student transeunt value between Father, Mother, or Other as the head of the household.

14. Girls in the secondary schools of North Dakota had significantly higher self-concepts and attitudes toward school than did boys.

Implications of the Study

One general implication of the research seemed to permeate the results of the study: Educators cannot successfully tuck people into cubicles. The problem is to fashion the educational institution to serve the people. This problem is ages old; yet, it is forever new.

To illustrate (Table 28), teacher opinion on what size school fostered an ideal school climate (over 500 students) was at total variance with what the research indicated was the ideal size school

for students (under 500 students). Consequently, if the schools are to serve the students, the research results indicated that no secondary school should be larger than 500 students. This can be accomplished in larger cities by a system of schools within schools.

2. Similarly, the conceptual basis for reorganization of school districts in North Dakota should include student self-concept and attitude toward school as well as monetary considerations.

3. Similarly, the conceptual basis for school district reorganization in North Dakota should be shifted from purely monetary considerations to a combination of monetary and optimum size considerations for building student self-concept and attitude toward school. The research indicated that secondary schools of under 250 students may be more expensive to operate (Statewide Study of Education, 1967) as an example, but they provided school environments in which students could build better self-concepts and attitudes toward school. If students have better self-concepts and attitudes toward school, it follows that they will be more receptive to new learning in all areas.

Then, too, consideration of the student background transeunts indicated that the conceptual basis for teaching in the areas of music, drama, and sports needs to be changed. A thorough study of teacher preparation in these areas at the college and university level as well as at the State Department level is recommended.

4. In North Dakota if a student's parental occupation was other (Tables 29 and 30) than that of a businessman, farmer, laborer or professional, the student suffered in the school's social structure and climate as well as in the peer area. It is recommended that

the State Department of Public Instruction identify and study this group of students in the interest of the student and of society.

5. The data, also, indicated that universities engaged in the preparation of school administrators need to investigate the possibilities of a change in emphasis in the administration curriculum. Changing times require that school administrators view their role as that of a "helping relationship" to students, teachers, and the community.

To play this role the administrator not only must be a finance and personnel man, but he must also be a philosopher who can lead by being a genuine three dimensional individual. He encourages a sense of community in the school district in which he serves. An open climate of trust and cordiality leading to individual creativity, the student transeunt data indicated, requires a climate free from repressive forces. It is in this area of school administration that existential philosophy can serve the administrator through the works of Buber, DeChardin, and Whitehead, Kierkegaard and the playwright, Ibsen.

Recommendations for Further Research

Based on the findings of the study this researcher offers the following recommendations for further research:

1. Brookover, Erickson and Joiner (1967) found that the proportion of students who identify teachers as significant others declines through the school years. A longitudinal study should be conducted to see if climates affect different age students in different ways. Such a study would also hold implications for achievement inasmuch as Brookover, et al. found the correlation between self-concept of ability and G.P.A. also declines throughout the school years.

2. Research into the effects on student self-concept and attitude toward should should be conducted under varying conditions and circumstances. The effects on student self-concept and attitude toward school of an administrator instructing, for college credit, his staff in the philosophy and in the psychology of learning would be helpful as a guide in developing in-service education.

3. Self-concept and achievement are the basis of many studies. Research should be conducted to see if the differences which were found between climate and student self-concept and attitude toward school are the same as those between climate and student achievement.

4. In the past, most of the research concerning high school size limited itself to the investigation of grade records and economic factors. While the present study was far from conclusive, it did show that we need additional insight into the development of attitudes and values at this stage of the student's educational career. This North Dakota study might provide a beginning to the building of empirical data which would lead to some conclusions in the field. Therefore, a replication of this study, perhaps through the use of different instruments, testing student self-concept and attitude toward school climate would be helpful.

APPENDIX A

NORTH DAKOTA SCHOOLS INCLUDED IN THE STUDY

School size 1 (over 1,000)

Fargo North

Fargo South

Jamestown

Mandan

Minot

Williston

School size 2 (501-1,000)

Dickinson

Valley City

Wahepton

West Fargo

School size 3 (251-500)

Carrington

Casselton

Cavalier

Crosby

Langdon

Oaks

School size 4 (100-250)

Elgin

Flasher

Hazelton-Moffit

Hillsboro

New Salem

School size 5 (under 100)

Antler

Balta

Binford

Bowbells

Braddock

Carpio

Cleveland

Columbus

Deering

Fingal

Goodrich

Noonan (Crosby)

Souris

APPENDIX B

February 25, 1972

Dear Educator:

We are all concerned about and interested in providing quality education. Nothing is more important for each individual in our society, nor more important for the general well-being of our society itself, than a good education. But good education doesn't just happen, it takes a lot of effort on the part of many hard-working people.

In this day of educational criticism, of demands for accountability, and of ceaseless questioning about what good education is and how it can be achieved, professional educators K-University are searching for answers. One of the procedures for obtaining answers is research. Even though many areas of education at all levels need to be researched, one of the most significant and necessary is research on school size and the organizational climate of schools as related to factors of student learning. This is the nature of Mr. Sorum's research and he is inviting your participation in providing important data.

Mr. Marvin Sorum has been actively involved in North Dakota education for several years. He has taught secondary school students and has been a High School Principal. Marv is vitally interested in secondary education in North Dakota and concerned about the essentials of quality education and how it is facilitated. His present research is designed to provide some important answers to some of these educational questions. I hope that you will be able to participate in this study. Your assistance and cooperation can provide valuable data for education in our state.

Cordially,

Ivan J. K. Dahl, Advisor
Doctoral Program for Mr. Sorum

ID:yh

February 16, 1972

Marvin E. Sorum
A-10 Princeton Ct.
Grand Forks, North Dakota

Dear Mr. Sorum:

Our schools have been doing an excellent job, I feel, in the cognitive areas but there is room for improvement in the affective domain. The survey you propose to make should be very helpful to schools and to our department. We think your study is very fine and we would be interested in releasing the results of your study to our administrators and secondary school principals.

Enclosed find a copy of the North Dakota Educational Director you requested.

Sincerely yours,

DEPARTMENT OF PUBLIC INSTRUCTION

HAROLD MICHELSON, Director
Secondary Education

HM:sf
Encl.

A-10 Princeton Ct.
University of North Dakota
Grand Forks, North Dakota
February 24, 1972

Dear

Empirically it is true, I believe, that our North Dakota high schools are doing an excellent job in the cognitive areas of education. We can measure that area by student success at colleges and universities. The cognitive area has, therefore, been measured for years both in high schools and in colleges and universities.

But the affective area, a measure of student self-appraisal and feelings toward school, has never been measured in North Dakota on a state-wide basis. The North Dakota State Department of Public Instruction together with thirty-seven other State Departments across the country in a joint effort with the U. S. Department of Education has only recently developed instruments to measure this area. By making a study on a state-wide basis in the affective area, I believe I can be of some service to education in North Dakota.

Your school is invited to participate in the study. It was invited because it is representative of one of five categories of schools in North Dakota based on high school size. If you choose to participate, two measuring instruments will be given to your seniors and one measuring instrument will be given to a sample of your secondary teaching staff. The two instruments to be answered by your seniors will take a total of forty minutes maximum. The teaching staff instrument will take about fifteen minutes. Your school will not be identified in any way in the body of the study; but your school together with five others will represent all North Dakota schools of your size. This is the extent of your school's participation. I will statistically treat the information and the State Department of Public Instruction will release the study.

If you decide to participate in the study, please send me a list of your seniors. I intend, with your permission and if time permits, to visit each school to administer the tests. I am looking forward to making appointments with you by telephone and also to visit with you. So that you shall know something about me, I have had fifteen years of teaching experience as a teacher and an administrator--all of it at Kenmare. Thank you for your consideration.

Yours sincerely,

Marvin E. Sorum
Graduate Student in
Administration

APPENDIX C

ORGANIZATIONAL CLIMATE DESCRIPTION QUESTIONNAIRE, FORM IV

Items That Compose Four Subtests: Teachers' Behavior

I. Disengagement

* 1. The mannerisms of teachers at this school are annoying.

2. There is a minority group of teachers who always oppose the majority.

3. Teachers exert group pressure on nonconforming faculty members.

4. Teachers seek special favors from the principal.

5. Teachers interrupt other faculty members who are talking in staff meetings.

6. Teachers ask nonsensical questions in faculty meetings.

7. Teachers ramble when they talk in faculty meetings.

8. Teachers at this school stay by themselves.

9. Teachers talk about leaving the school system.

10. Teachers socialize together in small select groups.

II. Hindrance

11. Routine duties interfere with the job of teaching.

12. Teachers have too many committee requirements.

13. Student progress reports require too much work.

14. Administrative paper work is burdensome at this school.

15. Sufficient time is given to prepare administrative reports. **

16. Instructions for the operation of teaching aids are available. **

* These numbers are used solely to list the items here by subject. The numbers do not correspond to the sequence in which the items actually appear.

** Scored negatively.

III. Esprit

17. The morale of the teachers is high.

18. The teachers accomplish their work with great vim, vigor, and pleasure.

19. Teachers at this school show much school spirit.

20. Custodial service is available when needed.

21. Most of the teachers here accept the faculty of their colleagues.

22. School supplies are readily available for use in classwork.

23. There is considerable laughter when teachers gather informally.

24. In faculty meetings, there is the feeling of "let's get things done."

25. Extra books are available for classroom use.

26. Teachers spend time after school with students who have individual problems.

IV. Intimacy

27. Teachers' closest friends are other faculty members at this school.

28. Teachers invite other faculty members to visit them at home.

29. Teachers know the family background of other faculty members.

30. Teachers talk about their personal life to other faculty members.

31. Teachers have fun socializing together during school time.

32. Teachers work together preparing administrative reports.

33. Teachers prepare administrative reports by themselves. **

Items That Compose Four Subtests: Principal's Behavior

V. Aloofness

34. Faculty meetings are organized according to a tight agenda.

35. Faculty meetings are mainly principal-report meetings.

36. The principal runs the faculty meeting like a business conference.

37. Teachers leave the grounds during the school day.

38. Teachers eat lunch by themselves in their own classrooms.

39. The rules set by the principal are never questioned.

40. Teachers are contacted by the principal each day.

41. School secretarial service is available for teachers' use. **

42. Teachers are informed of the results of a supervisor's visit. **

VI. Production Emphasis

43. The principal makes all class scheduling decisions.

44. The principal schedules the work for the teachers.

45. The principal checks the subject-matter ability of teachers.

46. The principal corrects teachers' mistakes.

47. The principal insures that teachers work to their full capacity.

48. Extra duty for teachers is posted conspicuously.

49. The principal talks a great deal.

VII. Thrust

50. The principal goes out of his way to help teachers.

51. The principal sets an example by working hard himself.

52. The principal uses constructive criticism.

53. The principal is well prepared when he speaks at school functions.

54. The principal explains his reasons for criticism to teachers.

55. The principal looks out for the personal welfare of teachers.

56. The principal is in the building before teachers arrive.

57. The principal tells teachers of new ideas he has run across.

58. The principal is easy to understand.

VIII. Consideration.

59. The principal helps teachers solve personal problems.

60. The principal does personal favors for teachers.

61. The principal stays after school to help teachers finish their work.

62. The principal helps staff members settle minor differences.

63. Teachers help select which courses will be taught.

64. The principal tries to get better salaries for teachers.

Personal history: (Please check where you think it is appropriate.)

Do you participate in:

sports _____
music _____
debate _____
student council _____
journalism _____
drama _____
F.F.A.-F.H.A. _____

Father's (or mother's) occupation:

businessman _____
farmer _____
laborer _____
professional _____
other _____

Career plans:

more education _____
going into business _____
going to work _____
other _____

Do you or have you worked regularly or seasonally:

on the farm _____
in the city _____
in the household _____
don't work _____

I have ____(number) brothers and sisters.
By order of birth, I am the_____ child in the family.

Sex:
male _____
female _____

Scholastic standing: (Where do you think?)

upper one-half of class _____
lower one-half of class _____

Who is head of your household?

father _____
mother _____
other _____

SCHOOL SENTIMENT INDEX
Secondary Level

DIRECTIONS: For each statement, indicate the extent to which you agree or disagree by marking the answer sheet:

A) if you strongly agree
B) if you agree
C) if you disagree
D) if you strongly disagree

For example:

I. My classes are too easy.

If you disagree with the statement you should mark C on the answer side of the page.

	A	B	C	D
I.	( )	( )	(x)	( )

There are no right or wrong answers, so respond to each item as honestly as you can. Do not write your name on your answer sheet.

A = if you strongly agree, B = if you agree, C = if you disagree, D = if you strongly disagree

	A	B	C	D	
1.	( )	( )	( )	( )	My teachers rarely explain to me why I deserve the grades I earn on my assignments and tests.
2.	( )	( )	( )	( )	I do my best in school.
3.	( )	( )	( )	( )	My teachers are interested in the things I do outside of school.
4.	( )	( )	( )	( )	Each morning I look forward to coming to school.
5.	( )	( )	( )	( )	My school has too many rules.
6.	( )	( )	( )	( )	My teachers allow students some choice in what they study in class.
7.	( )	( )	( )	( )	I often feel rushed and nervous at school.
8.	( )	( )	( )	( )	My teachers give assignments that are too difficult.
9.	( )	( )	( )	( )	Students here aren't very friendly.
10.	( )	( )	( )	( )	My teachers try to make their subjects interesting to me.
11.	( )	( )	( )	( )	I hate having to do homework.
12.	( )	( )	( )	( )	My teachers are interested in what I have to say.
13.	( )	( )	( )	( )	When I'm at school, I'm usually unhappy.
14.	( )	( )	( )	( )	This school is run like a prison.
15.	( )	( )	( )	( )	In most of my classes, individual students can choose assignments which are interesting to them.
16.	( )	( )	( )	( )	If I did something wrong at school, I know I would get a second chance.
17.	( )	( )	( )	( )	My teachers give assignments that are just busy-work.
18.	( )	( )	( )	( )	I enjoy working on class projects with other students.
19.	( )	( )	( )	( )	My teachers really like their subjects.
20.	( )	( )	( )	( )	I would rather learn a new sport than play one I already know.
21.	( )	( )	( )	( )	My teachers are personally concerned about me.

A = if you strongly agree, B = if you agree, C = if you disagree, D = if you strongly disagree

	A	B	C	D	
22.	( )	( )	( )	( )	School depresses me.
23.	( )	( )	( )	( )	Whenever I'm called to one of the offices at school, I feel upset.
24.	( )	( )	( )	( )	I think there is too much pressure in school.
25.	( )	( )	( )	( )	My teachers give me too much work.
26.	( )	( )	( )	( )	School is a good place for making friends.
27.	( )	( )	( )	( )	My teachers are boring.
28.	( )	( )	( )	( )	I like the challenge of a difficult assignment.
29.	( )	( )	( )	( )	My teachers don't try to understand young people.
30.	( )	( )	( )	( )	I stay home from school whenever I can.
31.	( )	( )	( )	( )	My classes are too big.
32.	( )	( )	( )	( )	I'm very interested in what goes on at this school.
33.	( )	( )	( )	( )	My teachers explain assignments clearly.
34.	( )	( )	( )	( )	In school I have to memorize too many facts.
35.	( )	( )	( )	( )	The main reason for going to school is to learn.
36.	( )	( )	( )	( )	If I had a serious problem, I don't know one teacher in my school I could go to.
37.	( )	( )	( )	( )	Students have enough voice in determining how this school is run.
38.	( )	( )	( )	( )	My teachers have encouraged me to think for myself.
39.	( )	( )	( )	( )	My teachers have been fair to me.
40.	( )	( )	( )	( )	I usually don't get involved in many school activities.
41.	( )	( )	( )	( )	My teachers won't give me any idea of what will be on their tests.
42.	( )	( )	( )	( )	I really like most of the kids at this school.
43.	( )	( )	( )	( )	My teachers don't allow me to be creative.

A = if you strongly agree, B = if you agree, C = if you disagree, D = if you strongly disagree

	A	B	C	D	
44.	( )	( )	( )	( )	Teachers recognize my right to a difficult opinion.
45.	( )	( )	( )	( )	I get tired of listening to my teachers talk all the time.
46.	( )	( )	( )	( )	I attend many school events.
47.	( )	( )	( )	( )	I like to talk to my teachers after class.
48.	( )	( )	( )	( )	I think my teachers are too old-fashioned.
49.	( )	( )	( )	( )	I really feel I'm part of my school.
50.	( )	( )	( )	( )	My teachers frequently show a lack of preparation.
51.	( )	( )	( )	( )	It is difficult for a new student to find friends here.
52.	( )	( )	( )	( )	I have a good relationship with most of my teachers.
53.	( )	( )	( )	( )	My favorite classes are those in which I learn the most.
54.	( )	( )	( )	( )	I would like to go to school all year long.
55.	( )	( )	( )	( )	Each September I look forward to the beginning of school.
56.	( )	( )	( )	( )	Our school is so large, I often feel lost in the crowd.
57.	( )	( )	( )	( )	I usually get the grade I deserve in a class.
58.	( )	( )	( )	( )	My teachers are friendly toward the students.
59.	( )	( )	( )	( )	I try to do good work in my class.
60.	( )	( )	( )	( )	My teachers still respect me as a person even when I've done poorly on my school work.
61.	( )	( )	( )	( )	I like school better than my friends do.
62.	( )	( )	( )	( )	There's no privacy at school.
63.	( )	( )	( )	( )	My teachers let me know what is expected of me.
64.	( )	( )	( )	( )	I enjoy the social life here.
65.	( )	( )	( )	( )	My teachers grade me fairly.

A = if you strongly agree, B = if you agree, C = if you disagree, D = if you strongly disagree

	A	B	C	D	
66.	( )	( )	( )	( )	There are many closed groups of students here.
67.	( )	( )	( )	( )	My teachers like working with young people.
68.	( )	( )	( )	( )	I often buy books with my own money.
69.	( )	( )	( )	( )	My teachers are too concerned with discipline.
70.	( )	( )	( )	( )	I liked school better when I was in elementary school than I do now.
71.	( )	( )	( )	( )	At school, other people really care about me.
72.	( )	( )	( )	( )	If I thought I could win, I'd like to run for an elected student body office.
73.	( )	( )	( )	( )	My teachers will discuss grade changes with me.
74.	( )	( )	( )	( )	My teachers just don't care about students if they're not going to college.
75.	( )	( )	( )	( )	I do more school work than just what is assigned.
76.	( )	( )	( )	( )	Teachers at my school cannot control their classes.
77.	( )	( )	( )	( )	My teachers give me individual help willingly.
78.	( )	( )	( )	( )	Lunch time at school is not fun.
79.	( )	( )	( )	( )	My teachers are often impatient.
80.	( )	( )	( )	( )	If I had the choice, I wouldn't go to school at all.
81.	( )	( )	( )	( )	My teachers have "pets".
82.	( )	( )	( )	( )	My teachers often waste too much time explaining things.
83.	( )	( )	( )	( )	I follow the school rules.

SELF APPRAISAL INVENTORY

Secondary Level

DIRECTIONS:

Please show whether you agree or disagree with each of the statements in this booklet by marking one of the spaces on the answer sheet.

a = Strongly Agree, b = Agree, c = Disagree, d = Strongly Disagree

For example:

	a.	b.	c.	d.
I want to be a movie star.	( )	( )	(x)	( )
I like chocolate cake.	(x)	( )	( )	( )

There are no right or wrong answers, so respond to each statement as honestly as you can.

Do not write your name on the answer sheet. Mark whether you are a boy or girl and write your age and grade on the bottom of your answer sheet before you begin the booklet.

a = Strongly Agree, b = Agree, c = Disagree, d = Strongly Disagree

	a	b	c	d	
1.	( )	( )	( )	( )	I like to meet new people.
2.	( )	( )	( )	( )	I can disagree with my family.
3.	( )	( )	( )	( )	School work is fairly easy for me.
4.	( )	( )	( )	( )	I am satisfied to be just what I am.
5.	( )	( )	( )	( )	I ought to get along better with other people.
6.	( )	( )	( )	( )	My family thinks I don't act as I should.
7.	( )	( )	( )	( )	I usually like my teachers.
8.	( )	( )	( )	( )	I am a cheerful person.
9.	( )	( )	( )	( )	People often pick on me.
10.	( )	( )	( )	( )	I do my share of work at home.
11.	( )	( )	( )	( )	I often feel upset in school.
12.	( )	( )	( )	( )	I often let other people have their way.
13.	( )	( )	( )	( )	Most people have fewer friends than I do.
14.	( )	( )	( )	( )	No one pays much attention to me at home.
15.	( )	( )	( )	( )	I can get good grades if I want to.
16.	( )	( )	( )	( )	I can be trusted.
17.	( )	( )	( )	( )	I am easy to like.
18.	( )	( )	( )	( )	There are times when I would like to leave home.
19.	( )	( )	( )	( )	I forget most of what I learn.
20.	( )	( )	( )	( )	I am popular with kids my own age.
21.	( )	( )	( )	( )	I am popular with girls.
22.	( )	( )	( )	( )	My family is glad when I do things with them.
23.	( )	( )	( )	( )	I often volunteer in school.

a = Strongly Agree, b = Agree, c = Disagree, d = Strongly Disagree

	a	b	c	d	
24.	( )	( )	( )	( )	I am a happy person.
25.	( )	( )	( )	( )	I am lonely very often.
26.	( )	( )	( )	( )	My family respects my ideas.
27.	( )	( )	( )	( )	I am a good student.
28.	( )	( )	( )	( )	I often do things that I'm sorry for later.
29.	( )	( )	( )	( )	Older kids do not like me.
30.	( )	( )	( )	( )	I behave badly at home.
31.	( )	( )	( )	( )	I often get discouraged in school.
32.	( )	( )	( )	( )	I wish I were younger.
33.	( )	( )	( )	( )	I am always friendly toward other people.
34.	( )	( )	( )	( )	I usually treat my family as well as I should.
35.	( )	( )	( )	( )	My teacher makes me feel I am not good enough.
36.	( )	( )	( )	( )	I always like being the way I am.
37.	( )	( )	( )	( )	Most people are much better liked than I am.
38.	( )	( )	( )	( )	I cause trouble to my family.
39.	( )	( )	( )	( )	I am slow in finishing my school work.
40.	( )	( )	( )	( )	I am often unhappy.
41.	( )	( )	( )	( )	I am popular with boys.
42.	( )	( )	( )	( )	I know what is expected of me at home.
43.	( )	( )	( )	( )	I can give a good report in front of the class.
44.	( )	( )	( )	( )	I am not as nice looking as most people.
45.	( )	( )	( )	( )	I don't have many friends.
46.	( )	( )	( )	( )	I sometimes argue with my family.

a = Strongly Agree, b = Agree, c = Disagree, d = Strongly Disagree

	a	b	c	d	
47.	( )	( )	( )	( )	I am proud of my school work.
48.	( )	( )	( )	( )	If I have something to say, I usually say it.
49.	( )	( )	( )	( )	I am among the last to be chosen for teams.
50.	( )	( )	( )	( )	I feel that my family always trusts me.
51.	( )	( )	( )	( )	I am a good reader.
52.	( )	( )	( )	( )	I don't worry much.
53.	( )	( )	( )	( )	It is hard for me to make friends.
54.	( )	( )	( )	( )	My family would help me in any kind of trouble.
55.	( )	( )	( )	( )	I am not doing as well in school as I would like to.
56.	( )	( )	( )	( )	I have a lot of self control.
57.	( )	( )	( )	( )	Friends usually follow my ideas.
58.	( )	( )	( )	( )	My family understands me.
59.	( )	( )	( )	( )	I find it hard to talk in front of the class.
60.	( )	( )	( )	( )	I often feel ashamed of myself.
61.	( )	( )	( )	( )	I wish I had more close friends.
62.	( )	( )	( )	( )	My family often expects too much of me.
63.	( )	( )	( )	( )	I am good in my school work.
64.	( )	( )	( )	( )	I am a good person.
65.	( )	( )	( )	( )	Sometimes I am hard to be friendly with.
66.	( )	( )	( )	( )	I get upset easily at home.
67.	( )	( )	( )	( )	I like to be called on in class.
68.	( )	( )	( )	( )	I wish I were a different person.

a = Strongly Agree, b = Agree, c = Disagree, d = Strongly Disagree

	a	b	c	d	
69.	( )	( )	( )	( )	I am fun to be with.
70.	( )	( )	( )	( )	I am an important person to my family.
71.	( )	( )	( )	( )	My classmates think I am a good student.
72.	( )	( )	( )	( )	I am sure of myself.
73.	( )	( )	( )	( )	Often I don't like to be with other children.
74.	( )	( )	( )	( )	My family and I have a lot of fun together.
75.	( )	( )	( )	( )	I would like to drop out of school.
76.	( )	( )	( )	( )	I can always take care of myself.
77.	( )	( )	( )	( )	I would rather be with kids younger than me.
78.	( )	( )	( )	( )	My family usually considers my feelings.
79.	( )	( )	( )	( )	I can disagree with my teacher.
80.	( )	( )	( )	( )	I can't be depended on.

APPENDIX D

APPENDIX D

ORGANIZATIONAL CLIMATE DESCRIPTION QUESTIONNAIRE*

INSTRUCTIONS: Enclosed in this folder are some questions about your school. Please answer them by marking one of the set of lines provided for each answer. Do not dwell too long on any one item but answer it as you think the situation exists in your school. There are a total of 64 items that should not take more than a few minutes to answer.

REMEMBER: Answer each question as you think the situation exists in your school.

YOU: As an individual you cannot be identified with this instrument.

	Rarely Occurs	Some-times Occurs	Often Occurs	Very fre-quently Occurs
1. Teacher's closest friends are other faculty members at this school.	_____	_____	_____	_____
2. The mannerisms of teachers at this school are annoying.	_____	_____	_____	_____
3. Teachers spend time after school with students who have individual problems.	_____	_____	_____	_____
4. Instructions for the operation of teaching aids are available.	_____	_____	_____	_____
5. Teachers invite other faculty members to visit them at home.	_____	_____	_____	_____
6. There is a minority group of teachers who always oppose the majority.	_____	_____	_____	_____
7. Extra books are available for classroom use.	_____	_____	_____	_____
8. Sufficient time is given to prepare administrative reports.	_____	_____	_____	_____
9. Teachers know the family background of other faculty members.	_____	_____	_____	_____
10. Teachers exert group pressure on nonconforming faculty members.	_____	_____	_____	_____
11. In faculty meetings, there is the feeling of "let's get things done."	_____	_____	_____	_____
12. Administrative paper work is burdensome at this school.	_____	_____	_____	_____
13. Teachers talk about their personal life to other faculty members.	_____	_____	_____	_____
14. Teachers seek special favors from the principal.	_____	_____	_____	_____

	Rarely Occurs	Some-times Occurs	Often Occurs	Very fre-quently Occurs
15. School supplies are readily available for use in classwork.	_____	_____	_____	_____
16. Student progress reports require too much work.	_____	_____	_____	_____
17. Teachers have fun socializing together during school time.	_____	_____	_____	_____
18. Teachers interrupt other faculty members who are talking in staff meeting.	_____	_____	_____	_____
19. Most of the teachers here accept the faults of their colleagues.	_____	_____	_____	_____
20. Teachers have too many committee requirements.	_____	_____	_____	_____
21. There is considerable laughter when teachers gather informally.	_____	_____	_____	_____
22. Teachers ask nonsensical questions in faculty meetings.	_____	_____	_____	_____
23. Custodial service is available when needed.	_____	_____	_____	_____
24. Routine duties interfere with the job of teaching.	_____	_____	_____	_____
25. Teachers prepare administrative reports by themselves.	_____	_____	_____	_____
26. Teachers ramble when they talk in faculty meetings.	_____	_____	_____	_____
27. Teachers at this school show much school spirit.	_____	_____	_____	_____
28. The principal goes out of his way to help teachers.	_____	_____	_____	_____
29. The principal helps teachers solve personal problems.	_____	_____	_____	_____
30. Teachers at this school stay by themselves.	_____	_____	_____	_____

	Rarely Occurs	Some-times Occurs	Often Occurs	Very fre-quently Occurs
31. The teachers accomplish their work with great vim, vigor, and pleasure.	_____	_____	_____	_____
32. The principal sets an example by working hard himself.	_____	_____	_____	_____
33. The principal does personal favors for teachers.	_____	_____	_____	_____
34. Teachers eat lunch by themselves in their own classrooms.	_____	_____	_____	_____
35. The morale of the teachers is high.	_____	_____	_____	_____
36. The principal uses constructive criticism.	_____	_____	_____	_____
37. The principal stays after school to help teachers finish their work.	_____	_____	_____	_____
38. Teachers socialize together in small select groups.	_____	_____	_____	_____
39. The principal makes all class-scheduling decisions.	_____	_____	_____	_____
40. Teachers are contacted by the principal each day.	_____	_____	_____	_____
41. The principal is well prepared when he speaks at school functions.	_____	_____	_____	_____
42. The principal helps staff members settle minor differences.	_____	_____	_____	_____
43. The principal schedules the work for the teachers.	_____	_____	_____	_____
44. Teachers leave the grounds during the school day.	_____	_____	_____	_____
45. Teachers help select which courses will be taught.	_____	_____	_____	_____
46. The principal corrects teachers' mistakes.	_____	_____	_____	_____

		Rarely Occurs	Sometimes Occurs	Often Occurs	Very frequently Occurs
47.	The principal talks a great deal.	_____	_____	_____	_____
48.	The principal explains his reasons for criticism to teachers.	_____	_____	_____	_____
49.	The principal tries to get better salaries for teachers.	_____	_____	_____	_____
50.	Extra duty for teachers is posted conspicuously.	_____	_____	_____	_____
51.	The rules set by the principal are never questioned.	_____	_____	_____	_____
52.	The principal looks out for the personal welfare of teachers.	_____	_____	_____	_____
53.	School secretarial service is available for teachers' use.	_____	_____	_____	_____
54.	The principal runs the faculty meeting like a business conference.	_____	_____	_____	_____
55.	The principal is in the building before teachers arrive.	_____	_____	_____	_____
56.	Teachers work together preparing administrative reports.	_____	_____	_____	_____
57.	Faculty meetings are organized according to a tight agenda.	_____	_____	_____	_____
58.	Faculty meetings are mainly principal-report meetings.	_____	_____	_____	_____
59.	The principal tells teachers of new ideas he has run across.	_____	_____	_____	_____
60.	Teachers talk about leaving the school system.	_____	_____	_____	_____
61.	The principal checks the subject-matter ability of teachers.	_____	_____	_____	_____

	Rarely Occurs	Some-times Occurs	Often Occurs	Very fre-quently Occurs
62. The principal is easy to understand.	_____	_____	_____	_____
63. Teachers are informed of the results of a supervisor's visit.	_____	_____	_____	_____
64. The principal insures that teachers work to their full capacity.	_____	_____	_____	_____

SCHOOL SENTIMENT INDEX
(Ranked test items by subscale)

I. (1) Teacher--Mode of Instruction

* 1. My teachers rarely explain to me why I deserve the grades I earn on my assignments and tests.

2. My teachers give assignments that are too difficult.

3. My teachers try to make their subjects interesting to me. **

4. My teachers give assignments that are just busy-work.

5. My teachers really like their subjects. **

6. My teachers give me too much work.

7. My teachers are boring.

8. My teachers explain assignments clearly. **

9. In school I have to memorize too many facts.

10. My teachers have encouraged me to think for myself. **

11. My teachers won't give me any idea of what will be on their tests.

12. I get tired of listening to my teachers talk all the time.

13. My teachers frequently show a lack of preparation.

14. I usually get the grade I deserve in a class. **

15. My teachers grade me fairly. **

16. My teachers give me individual help willingly. **

17. My teachers often waste too much time explaining things.

* These numbers are used solely to list the items here by subtests. The numbers do not correspond to the sequence in which the items actually appear in the test.

**Scored negatively.

II. (2) Teacher--Authority and Control

18. My teachers allow students some choice in what they study in class. **

19. In most of my classes, individual students can choose assignments which are interesting to them. **

20. My teachers have been fair to me. **

21. My teachers don't allow me to be creative.

22. Teachers recognize my right to a difficult opinion. **

23. My teachers still respect me as a person even when I've done poorly on my school work. **

24. My teachers let me know what is expected of me. **

25. My teachers are too concerned with discipline.

26. My teachers will discuss grade changes with me. **

27. Teachers at my school cannot control their classes.

III. (3) Teacher--Interpersonal Relationships

28. My teachers are interested in the things I do outside of school. **

29. My teachers are interested in what I have to say. **

30. My teachers are personally concerned about me. **

31. My teachers don't try to understand young people.

32. I like to talk to my teachers after class. **

33. I think my teachers are too old-fashioned.

34. I have a good relationship with most of my teachers. **

35. My teachers are friendly toward the students. **

36. My teachers like working with young people. **

37. My teachers just don't care about students if they're not going to college.

38. My teachers are often impatient.

39. My teachers have "pets".

IV. (4) Learning

40. I hate having to do homework.

41. I would rather learn a new sport than play one I already know. **

42. I like the challenge of a difficult assignment. **

43. The main reason for going to school is to learn. **

44. My favorite classes are those in which I learn the most. **

45. I often buy books with my own money. **

46. I do more school work than just what is assigned. **

V. (5) School Social Structure and Climate

47. My school has too many rules.

48. I often feel rushed and nervous at school.

49. This school is run like a prison.

50. If I did something wrong at school, I know I would get a second chance. **

51. Whenever I'm called to one of the offices at school, I feel upset.

52. I think there is too much pressure in school.

53. My classes are too big.

54. I'm very interested in what goes on at this school. **

55. If I had a serious problem, I don't know one teacher in my school I could go to.

56. Students have enough voice in determining how this school is run. **

57. I usually don't get involved in many school activities.

58. I attend many school events. **

59. I really feel I'm part of my school. **

60. Our school is so large, I often feel lost in the crowd.

61. There's no privacy at school.

62. There are many closed groups of students here.

63. At school, other people really care about me. **

64. If I thought I could win, I'd like to run for an elected student body office. **

65. Lunch time at school is not fun.

66. I follow the school rules. **

VI. (6) Peer

67. Students here aren't very friendly.

68. I enjoy working on class projects with other students. **

69. School is a good place for making friends. **

70. I really like most of the kids at this school. **

71. It is difficult for a new student to find friends here.

72. There are many closed groups of students here.

VII. (7) General

73. I do my best in school. **

74. Each morning I look forward to coming to school. **

75. When I'm at school, I'm usually unhappy.

76. School depresses me.

77. I stay home from school whenever I can.

78. I would like to go to school all year long. **

79. Each September I look foward to the beginning of school. **

80. I try to do good work in my class. **

81. I like school better than my friends do. **

82. I liked school better when I was in elementary school than I do now.

83. If I had the choice, I wouldn't go to school at all.

SELF-APPRAISAL INVENTORY
(Ranked test items by subscale)

I. (1) Peer

* 1. I like to meet new people. **

2. I ought to get along better with other people.

3. People often pick on me.

4. Most people have fewer friends than I do. **

5. I am easy to like. **

6. I am popular with girls. **

7. I am lonely very often.

8. Other kids do not like me.

9. I am always friendly toward other people. **

10. Most people are much better liked than I am.

11. I am popular with boys. **

12. I don't have many friends.

13. I am among the last to be chosen for teams.

14. It is hard for me to make friends.

15. Friends usually follow my ideas. **

16. I wish I had more close friends.

* These numbers are used solely to list the items here by subtests. The numbers do not correspond to the sequence in which the items actually appear in the test.

** Scored negatively.

17. Sometimes I am hard to be friendly with.

18. I am fun to be with. **

19. Often I don't like to be with other children.

20. I would rather be with kids younger than me.

II. (2) Family

21. I can disagree with my family. **

22. My family thinks I don't act as I should.

23. I do my share of work at home. **

24. No one pays much attention to me at home.

25. There are times when I would like to leave home.

26. My family is glad when I do things with them. **

27. My family respects my ideas. **

28. I behave badly at home.

29. I usually treat my family as well as I should. **

30. I cause trouble to my family.

31. I know what is expected of me at home. **

32. I sometimes argue with my family.

33. I feel that my family always trusts me. **

34. My family would help me in any kind of trouble. **

35. My family understands me. **

36. My family often expects too much of me.

37. I get upset easily at home.

38. I am an important person to my family. **

39. My family and I have a lot of fun together. **

40. My family usually considers my feelings. **

III. (3) School

41. School work is fairly easy for me. **

42. I usually like my teachers. **

43. I often feel upset in school.

44. I can get good grades if I want to. **

45. I forget most of what I learn.

46. I often volunteer in school. **

47. I am a good student. **

48. I often get discouraged in school.

49. My teacher makes me feel I am not good enough.

50. I am slow in finishing my school work.

51. I can give a good report in front of the class. **

52. I am proud of my school work. **

53. I am a good reader. **

54. I am not doing as well in school as I would like to.

55. I find it hard to talk in front of the class.

56. I am good in my school work. **

57. I like to be called on in class. **

58. My classmates think I am a good student. **

59. I would like to drop out of school.

60. I can disagree with my teacher. **

IV. (4) General

61. I am satisfied to be just what I am. **

62. I am a cheerful person. **

63. I often let other people have their way.

64. I can be trusted. **

65. I am popular with kids my own age. **

66. I am a happy person.

67. I often do things that I'm sorry for later.

68. I wish I were younger.

69. I always like being the way I am. **

70. I am often unhappy.

71. I am not as nice looking as most people.

72. If I have something to say, I usually say it. **

73. I don't worry much. **

74. I have a lot of self-control. **

75. I often feel ashamed of myself.

76. I am a good person. **

77. I wish I were a different person.

78. I am sure of myself. **

79. I can always take care of myself. **

80. I can't be depended on.

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